

ECONOMIC ANALYSIS

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Summary

Maryland continues to be one of the Nation's highest educated states, and boasts high median wages. As time goes on since the end of the Great Recession, Maryland's economy continues to diversify, and there is employment growth across a number of industries. Economic output in Maryland continued to expand in 2018.

Employment in Maryland's industries saw an overall increase from 2017 to 2018. Fifty of 90 privately owned industry subsectors posted employment gains. Eighteen of 24 counties posted over the year private employment gains. When public employment is added, 19 of 24 counties saw over the year employment growth from 2017 to 2018.

Workers in Maryland are typically of the prime working age, and age related demographic shifts, while of general concern nationwide, are not a major issue facing Maryland in the near future.

Workers with all educational attainment levels have access to employment with higher than median wages, and opportunities to be in growing industries. These opportunities are more concentrated in occupations requiring an educational credential, but opportunities are not exclusive to only those with higher education. These opportunities are accessible in every workforce region across the state.

Highlights

- ❖ 19 Counties with over the year job growth in 2018
- **4** 19,100 jobs gained
- GDP growth of 1.6 percent
- Unemployment rate of 3.9 percent
- Labor force participation rate of 67.2 percent
- Employment growth in 12 of 19 sectors
- Average hourly earnings increase of 4.3 percent over the year

Economic Indicators

In 2018, Maryland's real GDP increased by 1.6 percent over 2017 (Bureau of Economic Analysis, 2019). Professional, scientific, and technical services, Manufacturing, and Information were the industries that drove growth in Maryland's GDP between 2017 and 2018. Combined, these industries accounted for 61.5 percent of the Maryland's GDP growth. In the same period, the United States' GDP grew at a rate of 2.9 percent. The US GDP growth was also driven by Information; Manufacturing; and Professional, scientific, and technical services. These industries accounted for 50.8 percent of the United States' GDP growth.

Other Maryland industries that expanded from 2017 to 2018 were Mining, quarrying, and oil and gas extraction; Utilities; Wholesale trade; Retail trade; Transportation and warehousing; Real estate and rental and leasing; Management of companies and enterprises; Administrative and support and waste management and remediation services; Educational services; Healthcare and social assistances; Other services; and Government. Maryland Industries that produced a lower GDP in 2018 compared to 2017 were Agriculture, forestry, fishing, and hunting; Construction; Finance and Insurance; Arts, entertainment, and recreation; and Accommodation and food services.



Figure 1 Government accounted for 19.7 percent of Maryland's 2018 GDP.

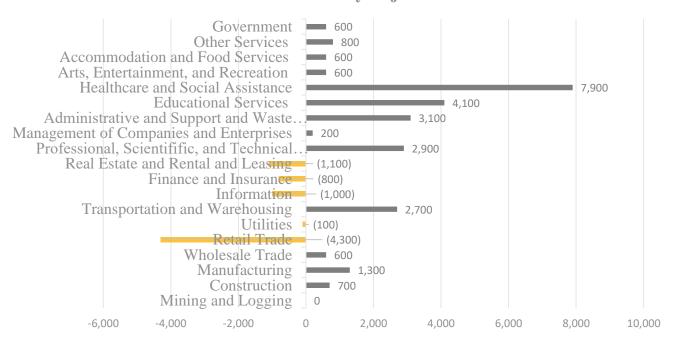
While the composition of Maryland's economy remained largely the same from 2017 to 2018, it should be noted that the share of GDP attributed to the government sector decreased by 0.2 percentage points, from 20.0 percent to 19.7 percent. Professional, scientific, and technical services increased its share of Maryland's GDP by 0.3 percentage points from 10.4 percent to 10.7 percent.

From 2017 to 2018, Maryland's industry sectors combined to add 19,100 new jobs (BLS CES, 2019). Healthcare and social assistance saw the largest gain, adding 7,900 jobs. Strong gains were also experienced in Educational services (4,100) and Administrative and support and waste management and remediation services (3,100).

Other sectors posting over the year gains in employment were: Construction; Manufacturing; Wholesale trade; Transportation and warehousing; Professional scientific and technical services; Management of companies and enterprises; Arts, entertainment, and recreation; Accommodation and food services; Other services; and Government. Sectors with and over the year decline were Retail trade, Utilities, Information, Finance and insurance, and Real estate and rental and leasing.

Average hourly earnings increased from \$28.34 in 2017 to \$29.57 in 2018, a gain of 4.3 percent.

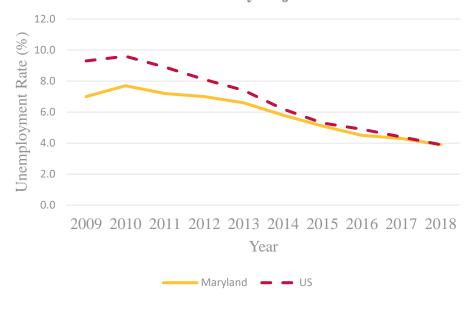
Industry Growth 2017 - 2018 Not Seasonally Adjusted



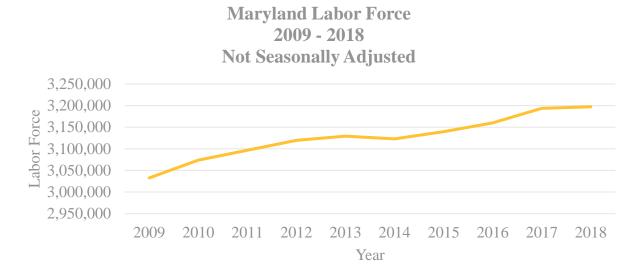
Labor Force and Demographics

In 2018, Maryland's annual average unemployment rate reached a ten year low at 3.9 percent, nearly half the rate of 2010 (7.7 percent) which represented the ten year high (BLS LAUS, 2019). Maryland's 2018 annual average rate was equal to the United States' unemployment rate. The national rate had been converging on the Maryland rate over the past ten years, with the Maryland rate typical lower. The labor force in Maryland grew at a rate of 0.1 percent from 2017 to 2018, reaching a level of 3,197,137 which represents a ten year high. Over the ten year period from 2009 to

Annual Average Unemployment Rate 2009 - 2018 Not Seasonally Adjusted



2018, the labor force grew at an annual rate of 0.5 percent from 3,032,700 in 2009 to the 2018 level of nearly 3.2 million workers. During this time, 2014 represented the only year between 2009 and 2018 with a contraction in the labor force, with an annual growth rate of -0.2 percent between 2013 and 2014.



In 2018, Maryland had as estimated population of 6,042,718 people (US Census Bureau, Population Division, 2019). The median age of Maryland's population was 38.8 years, making Maryland the 28th youngest state in the United States. Utah, the state with the youngest population, had a median age of 31 years in 2018; the state with the oldest population, Maine, had a median age of 44.9 years in 2018. Maryland ranked 10th out of the states for percentage of population between the ages of 25 and 54, the prime working age, with 40.2 percent of its population in this age range (2,427,340 people).

Maryland continued to be one of the highest educated states in the US with 39.0 percent of people over 25 years old holding a bachelor's degree or higher. This ranked fourth in the nation. This higher educational attainment level may be a partial reason that Maryland ranks first in the US with a median household income of \$78,916.

Maryland Growth Industries

Growth industries can be identified by their location quotient, a measure of the concentration of employment in a smaller area compared to a larger area, and over the year growth. Industries with a location quotient greater than one and over the year growth greater than zero. In 2018, Maryland had 18 such industries.

Of Maryland's growth industries, three of the 18 were in the goods producing domain. Construction of buildings, Specialty trade contractors, and Computer and electronic product manufacturing combined for 166,437 employees in 2018. These workers made an average weekly wage of \$1,395, with the highest wages in Computer and electronic product manufacturing with an average weekly wage of \$2,348. These industries gained a total of 4,235 employees between 2017 and 2018. Specialty trade contractors led the way with a gain of 2,737 employees.

The remaining 15 industries in the services providing domain combined to employ nearly one million workers, with 999,646 workers in 2018. The largest of these industries was Professional and technical services with 251,938 employees in 2018. Professional and technical services also added the most new employees in 2018, with 4,674 additional workers.

The Transportation and warehousing sector had three subsectors classified as growth industries in 2018 – Transit and ground passenger transportation, Couriers and messengers, and Warehousing and storage. These three subsectors combined to add 4,453 workers from 2017 to 2018. Warehousing and storage was the fastest growing of all Maryland growth industries with an over the year growth rate of 18.2 percent.

The Funds and trusts subsector had the highest pay of Maryland's growth industries with an average weekly wage of \$3,391.

Administrative and support services and Waste management and remediation services, subsectors of the Administrative and support and waste management and remediation services sector, combined to employ 173,207 workers in 2018, after adding 1,873 workers in 2018.

With 324,090 combined workers in subsectors classified as growth industries in 2018, Healthcare and social assistance was the most represented sector by employment level. Over 5,000 workers were added in the Ambulatory health care services, Hospitals, and Nursing and residential care facilities subsectors.

Local Employment Trends

Allegany County

Industry Name	2018 Employment	OTY%
Merchant wholesalers, durable goods	614	25.3
Broadcasting, except internet	207	24.7
Electronics and appliance stores	100	20.5
Food manufacturing	124	9.7
Gasoline stations	378	8.0
Administrative and support services	875	7.8
Specialty trade contractors	567	5.4
Motor vehicle and parts dealers	536	4.7
Real estate	134	4.7
Waste management and remediation services	81	3.8

Private employers in Allegany County employed 23,099 workers in 2018, after an over the year increase of 0.4 percent (85 employees). These workers earned an average weekly wage of \$701. The 3,728 workers in goods producing industries earned an average weekly wage of \$904, however, the goods producing domain in Allegany County contracted by 2.0 percent from 2017 to 2018, a reduction of 78 jobs. Private services providing companies in Allegany County added 163 jobs from 2017 to 2018, a 0.8 percent increase. The 19,371 workers in services providing industries earned an average weekly wage of \$662.

Allegany County had 25 industry subsectors add jobs from 2017 to 2018, with four in the goods producing domain, and 21 in the services providing domain. Overall, these industries employed 11,080 workers in 2018, or 48 percent of the private workforce. Allegany County's top 10 fastest growing industries were dominated by subsectors of the retail trade sector. The three retail trade subsectors accounted for 1,014 2018 employees. Food manufacturing and Specialty trade contractors were the two goods producing subsectors in the top 10. Administrative and support services along with Waste management and remediation services accounted for 956 employees in 2018.

Anne Arundel County

Industry Name	2018	OTY%
	Employment	
Warehousing and storage	1,059	24.6
Merchant wholesalers, nondurable goods	3,842	15.1
Data processing, hosting and related services	211	12.8
Miscellaneous manufacturing	505	12.2
Couriers and messengers	1,978	9.6
Textile product mills	96	9.1
Specialty trade contractors	12,488	8.8
Support activities for transportation	2,052	8.2
Machinery manufacturing	255	7.6
Nonmetallic mineral product manufacturing	371	7.5

After an over the year gain of 1.0 percent (2,210 workers), private employers in Anne Arundel County employed 226,241 workers in 2018. These workers earned average weekly wage of \$1,126. This growth was driven by firms in goods producing industries, which added 1,994 workers (7.0 percent growth) from 2017 to 2018. Workers in these fast growing industries earned an average weekly wage of \$1,633. Firms in private services providing industries also added workers, 216 from 2017 to 2018 (0.1 percent). The 195,566 workers in these firms earned an average weekly wage of \$1,046.

There were 43 industry subsectors that grew from 2017 to 2018 in Anne Arundel County. Fifteen firms were goods producing, and 28 were services providing. Firms in growing industries paid an average weekly wage of \$1,278-\$152 more than the county average for private workers. The top 10 growth industries in Anne Arundel County were dominated by goods producing subsectors, with five subsectors accounting for 13,715 employees in 2018. Four of those five were in the manufacturing sector- Miscellaneous manufacturing, Textile product mills, Machinery manufacturing, and Nonmetallic mineral product manufacturing. Specialty trade contractors, in the construction sector, was the largest subsector in the top 10, with 12,488 employees in 2018. Subsectors in Transportation and Warehousing accounted for the majority of services providing jobs with just over 5,000 employees.

Baltimore City

Industry Name	2018	OTY%
	Employment	
Management of companies and enterprises	3,703	63.3
Chemical manufacturing	1,230	26.0
Transportation equipment manufacturing	593	23.0
Warehousing and storage	8,522	16.4
Support activities for transportation	2,764	9.3
Publishing industries, except internet	2,108	7.7
Paper manufacturing	291	5.8
Construction of buildings	1,981	5.6
Data processing, hosting and related services	220	5.3
Performing arts and spectator sports	2,301	5.3

Private employers added 3,242 workers from 2017 to 2018 in Baltimore City. Virtually all of these gains were in the services providing domain (3,147 of the new employees). Workers in services providing industries gained a higher average weekly wage than workers in the goods producing domain, which is not the typical trend in other Maryland counties.

Twenty five of 37 industry subsectors with over the year gains were in the services providing domain. Transportation and warehousing subsectors accounted for 11,286 employees in the top 10 Baltimore City fastest growing industries. The two sectors, Warehousing and storage, and Support activities added a significant number of employees from 2017 to 2018, with over the year growth rates of 16.4 percent and 9.3 percent respectively. Four goods producing subsectors (three in manufacturing, one in construction) accounted for over 4,000 jobs in 2018.

Baltimore County

Industry Name	2018 Employment	OTY%
Warehousing and storage	951	128.1
Beverage and tobacco product manufacturing	255	45.7
Crop production	387	29.4
Heavy and civil engineering construction	2,163	18.4
Machinery manufacturing	1,201	9.8
Nonmetallic mineral product manufacturing	542	9.5
Membership associations and organizations	2,306	9.2
Transportation equipment manufacturing	1,172	8.9
Broadcasting, except internet	1,168	7.3
Support activities for transportation	1,737	7.0

Private firms in Baltimore County employed 322,856 workers in 2018, after adding 3,454 workers from 2017 to 2018 (a 1.1 percent growth). These workers earned an average weekly wage of \$1,048. This growth was nearly even between goods producing (1,627 workers added) and services providing (1,828 workers added) industries. Workers in goods producing industries earned a higher average weekly wage (\$1,310 compared to \$1,011 for services providing industries).

Forty-four industry subsectors grew from 2017 to 2018 in Baltimore County. Of these 15 were goods producing and 29 were services providing. Six of the top 10 Baltimore County fastest growing industries for 2018 were in the goods producing category, with four subsectors in Manufacturing, and one each in Agriculture and Construction. The four Manufacturing subsectors (Beverage and tobacco product manufacturing, Machinery Manufacturing, Nonmetallic mineral product manufacturing, and Transportation equipment manufacturing) accounted for 3,170 employees in 2018. Membership associations and organizations, a services providing subsector of the Other services sector, was the largest of the group with 2,306 employees.

Calvert County

Industry Name	2018 Employment	OTY%
Motor vehicle and parts dealers	424	24.0
Membership associations and organizations	168	15.9
Gasoline stations	225	14.8
Amusements, gambling, and recreation	295	13.5
Educational services	200	13.0
Specialty trade contractors	1,393	10.6
Building material and garden supply stores	241	8.6
Ambulatory health care services	1,300	8.2
Food and beverage stores	1,286	6.8
General merchandise stores	591	5.7

Calvert County private employers experienced a decline of 1,780 workers from 2017 to 2018. This loss was driven by declines in the goods producing domain; however, services providing firms grew at a rate of 1.0 percent over the year, providing a counterbalance to the losses.

Despite overall declines in goods producing industries, two industry subsectors added jobs at an impressive rate. These two industries combined to add 141 employees and grew at a rate of 10.7 percent. The 19 services providing firms added 485 workers, growing at a rate of 8.5 percent. Of the top 10 growth industries in Calvert County, nine were services providing industries. Specialty trade contractors was the lone goods producing industry in the top 10 and also the largest with nearly 1,400 employees. Five industries in the retail trade sector accounted for 2,767 employees in 2018 after an average over the year growth rate of 12.0 percent.

Caroline County

Industry Name	2018	OTY%
	Employment	
Merchant wholesalers, nondurable goods	117	44.4
Professional and technical services	254	17.1
Specialty trade contractors	627	13.8
Warehousing and storage	195	12.7
Heavy and civil engineering construction	145	11.5
Motor vehicle and parts dealers	369	8.5
Credit intermediation and related activities	129	7.5
Repair and maintenance	200	7.5
Administrative and support services	198	6.5
Nonstore retailers	204	5.2

Private employers in Caroline County added 318 workers from 2017 to 2018, bringing the total employed to 8,025 (4.1 percent over the year growth). These workers earned an average weekly wage of \$791. The goods producing domain made up about one third of private employment (2,470 workers) after growing at a rate of 5.7 percent over the previous year – a gain of 134 workers. The larger services providing domain (5,555 workers) added 184 workers, a growth rate of 3.4 percent. Workers in goods producing firms earned a higher wage of \$811 per week versus \$782 in services providing jobs.

Caroline County had 15 industry subsectors with an over the year growth from 2017 to 2018. Thirteen of these subsectors were services providing. Industries in the Construction sector (Specialty trade contractors and Heavy and civil engineering construction) represent the only two goods producing industries in the top 10 fastest growing industries for Caroline County. Specialty trade contractors also had the largest 2018 employment of the top 0 fastest growing industries with a 2018 employment of 627. The only other sector with multiple represented industries was Retail trade, with Motor vehicle and parts dealers and Nonstore retailers accounting for 573 workers in 2018.

Carroll County

Industry Name	2018 Employment	OTY%
Merchant wholesalers, nondurable goods	1,874	12.9
Insurance carriers and related activities	309	12.0
Crop production	205	9.0
Amusements, gambling, and recreation	917	7.8
Machinery manufacturing	936	7.1
Sports, hobby, music instrument, book stores	274	6.2
Food manufacturing	309	5.5
Real estate	293	5.0
Accommodation	377	4.7
Merchant wholesalers, durable goods	824	4.0

In 2018, private employers in Carroll County employed 50,098 workers who earned an average weekly wage of \$829. Employment in Carroll County declined by 466 workers, or 0.9 percent over the year. The loss was driven by contraction in the goods producing domain. Despite overall declines, there were 27 industry subsectors in Carroll County that posted over the year job gains. Moreover, 51.2 percent of workers privately employed in Carroll County worked in an industry that posted over the year job gains. Firms in these 27 subsectors not only grew faster, but the subsectors in the goods producing domain also paid wages of \$1,339, which is \$510 more than the county average.

Carroll County's top 10 growth industries were driven by industries in the Wholesale trade sector (Merchant wholesalers, nondurable goods and Merchant wholesalers, durable goods) and Manufacturing (Machinery manufacturing and Food manufacturing) which accounted for 2,698 and 1,245 employees, respectively. In addition to the two manufacturing industries, there was one other goods producing industry, Crop production in the Agriculture, forestry, fishing, and hunting sector.

Cecil County

Industry Name	2018 Employment	OTY%
Warehousing and storage	1,549	25.6
Miscellaneous store retailers	204	22.9
Support activities for transportation	89	14.1
Heavy and civil engineering construction	233	13.7
Administrative and support services	939	9.7
Food manufacturing	92	9.5
Merchant wholesalers, durable goods	275	7.4
Social assistance	708	6.9
Repair and maintenance	465	6.9
Specialty trade contractors	725	6.3

Cecil County private employers added 427 workers from 2017 to 2018. This 1.7 percent growth rate brought 2018 private employment to 25,942. These workers earned an average weekly wage of \$876. Growth in Cecil County was driven by industries in the service providing domain, where there was a 2.3 percent over the year growth. Employment at goods producing firms remained relatively flat from 2017 to 2018, with two fewer workers in 2018.

There were 25 industry subsectors with over the year growth in Cecil County, five were goods producing, and 20 were services providing. Transportation and warehousing was the largest represented sector in Cecil County's top 10 fastest growing industries, with Warehousing and storage and Support activities for transportation accounting for over 1,600 employees in 2018. While the majority of the industries were in the services providing domain, three of the top 10 were goods producing, with two in the Construction sector, and one in the manufacturing sector. Specialty trade contractors, Heavy and civil engineering construction, and Food manufacturing combined to employ 1,050 workers in 2018.

Charles County

Industry Name	2018	OTY%
	Employment	
Management of companies and enterprises	233	87.9
Fabricated metal product manufacturing	106	14.0
Truck transportation	168	12.0
Nursing and residential care facilities	1,091	11.0
Beverage and tobacco product manufacturing	94	5.6
Miscellaneous store retailers	316	5.3
Membership associations and organizations	206	5.1
Personal and laundry services	737	4.5
Furniture and home furnishings stores	213	3.9
Gasoline stations	237	3.5

Charles County private employers employed 31,401 workers in 2018. These workers made an average weekly wage of \$791. Workers in goods producing industries earned an average weekly wage of \$1,189, and workers in services providing industries earned an average weekly wage of \$724.

Of the 21 industry subsectors with over the year growth, 16 were services providing, and five were goods producing. Charles County's top 10 growth industries were concentrated in the Retail and other services sectors with half of the industries coming from these two sectors. Miscellaneous store retailers, Furniture and home furnishings stores, and Gasoline stations accounted for 766 workers in 2018, and the Other services industries Membership associations and organizations and Personal and laundry services combined to employ 943 workers. However, Nursing and residential care facilities employment made Health care and social assistance the sector with the highest employment, with 1,091 employees in 2018.

Dorchester County

Industry Name	2018	OTY%
	Employment	
Repair and maintenance	109	13.5
Merchant wholesalers, durable goods	136	8.8
Food manufacturing	1,762	7.2
General merchandise stores	324	5.9
Specialty trade contractors	352	5.7
Crop production	95	3.3
Administrative and support services	99	3.1
Health and personal care stores	116	1.8
Truck transportation	155	1.3
Motor vehicle and parts dealers	102	1.0

Goods producing employment in Dorchester County grew at a rate of 3.7 percent from 2017 to 2018, adding 112 workers. The 3,152 workers in goods producing industries earned an average weekly wage of \$824. Workers in services providing industries earned an average weekly wage of \$653.

In 2018, there were 15 industry subsectors with over the year jobs growth. Eleven of these subsectors were in the services providing domain, with five in the goods producing domain. Dorchester County's top 10 fastest growing industries were led by the Food manufacturing subsector, with nearly 1,800 employees in 2019. Goods producing employment in the top 10 also came from the Specialty trade contractors and crop production industries. Retail trade was the most represented sector in the services producing domain, with General merchandise stores, Health and personal care stores and Motor vehicle and parts dealers combining to employ 542 workers in 2018.

Frederick County

Industry Name	2018 Employment	OTY%
Merchant wholesalers, nondurable goods	758	33.7
Waste management and remediation services	161	16.7
Beverage and tobacco product manufacturing	316	14.1
Chemical manufacturing	977	14.1
Management of companies and enterprises	704	12.3
Performing arts and spectator sports	149	12.0
Furniture and home furnishings stores	375	10.6
Building material and garden supply stores	1,161	8.7
Furniture and related product manufacturing	93	8.1
Motion picture and sound recording industries	93	8.1

Private employers in Frederick County added 1,232 workers from 2017 to 2018, a 1.4 percent growth rate. The 86,365 workers earned an average weekly wage of \$932. Growth in Frederick County was driven by firms in the services providing domain, where 933 workers were added. Goods producing industries also experienced overall growth, adding 299 workers.

There were 37 Frederick industry subsectors with over the year private employment growth. Ten were goods producing subsectors, and 27 were services providing. 65.6 percent of Frederick's private workforce was employed in an industry subsector that grew from 2017 to 2018. Frederick County's top 10 fastest growing industries was dominated by employers in the Retail sector, with 1,536 total retail employees in Building material and garden supply stores and Furniture and home furnishings stores. Manufacturing was a close second, and with 1,386 workers, represented all of the goods producing employment in the top 10 fastest growing industry sectors. Chemical manufacturing was the largest in the goods producing domain, while Building material and garden supply stores lead the way in services providing.

Garrett County

Industry Name	2018 Employment	OTY%
Mining, except oil and gas	196	90.3
Merchant wholesalers, durable goods	273	46.0
Professional and technical services	379	13.1
Transit and ground passenger transportation	89	9.9
Food services and drinking places	1,219	6.6
Gasoline stations	303	5.6
Construction of buildings	622	4.5
Merchant wholesalers, nondurable goods	100	4.2
General merchandise stores	369	3.7
Real estate	373	3.3

From 2017 to 2018, Garrett County private employers added 124 workers, a 1.2 percent increase. Goods producing industries drove the growth, adding 101 workers (4.6 percent growth rate). Workers in goods producing firms also earned an average of \$301 more than workers in services providing industries (\$897 vs \$596). The average private employee in Garrett County earned \$664.

Though goods producing firms overall added more workers, 11 of the 17 industries with over the year employment growth were services providing. Food services and drinking places was the largest of the fastest growing industries in Garrett County with 1,219 workers in 2018. Eight of the 10 fastest growing industries were in the services providing domain. Mining (except oil and gas) and Construction of buildings, the two goods producing subsectors, combined to employ 818 workers in 2018.

Harford County

Industry Name	2018 Employment	OTY%
Beverage and tobacco product manufacturing	144	61.8
Merchant wholesalers, nondurable goods	1,297	27.0
Food manufacturing	1,089	13.6
Warehousing and storage	4,662	12.4
Truck transportation	912	10.5
Heavy and civil engineering construction	1,029	10.3
Merchant wholesalers, durable goods	1,333	9.8
Membership associations and organizations	440	9.7
Plastics and rubber products manufacturing	366	8.9
Transit and ground passenger transportation	439	8.9

After a gain of 851 employees (1.2 percent) from 2017 to 2018, Harford County's private employers employed 73,930 workers in 2018. These workers earned an average weekly wage of \$866. Growth was driven by gains in services providing industries, where 533 new workers joined payrolls between 2017 and 2018. Goods producing firms, though making up a smaller overall share, grew at a faster rate (2.9 percent compared to 0.9 percent), adding 318 jobs from 2017 to 2018.

Twelve of the 37 industry subsectors with over the year growth in Harford County were in the goods producing domain. With strong gains in Manufacturing and Construction, Harford County's top 10 fastest growing industries featured four subsectors in the goods producing domain, accounting for 2,628 workers in 2018. However, this growth was outpaced by a single subsector for the three Transportation and warehousing industries in the top 10. Warehousing and storage employed 4,662 workers in 2018, and combined with the other two subsectors (Truck transportation and Transit and ground passenger transportation), accounted for 6,013 Transportation and warehousing workers in 2018.

Howard County

Industry Name	2018 Employment	OTY%
Nonstore retailers	449	107.9
Couriers and messengers	512	36.2
Performing arts and spectator sports	1,203	26.0
Computer and electronic product manufacturing	1334	16.7
Machinery manufacturing	613	11.1
Beverage and tobacco product manufacturing	479	10.9
Furniture and home furnishings stores	604	10.4
Nonmetallic mineral product manufacturing	151	7.9
Support activities for transportation	358	7.5
Merchant wholesalers, nondurable goods	6,244	6.7

Workers employed by private firms in Howard County earned a 2018 average weekly wage of \$1,326. There were 154,679 private employees in 2018 after a 0.7 percent growth from 2017 (1,045 workers). Growth was concentrated in the services providing domain with 704 new jobs coming from these industries. The much smaller goods producing domain added 342 jobs, a growth rate of 1.7 percent.

There were 35 industry subsectors with over the year growth in Howard County. Twenty-five were in the services providing domain. Nonstore retailers in Howard County more than doubled their employment from 2017 to 2018, growing at a rate of 107.9 percent. Several large industries in the manufacturing sector (Computer and electronic product, Machinery, Beverage and tobacco producing, and Nonmetallic mineral product) averaged over the year growth of nearly 12 percent to a total employment of 2,577 workers in 2018. Computer and electronic product manufacturing was the largest and fastest growing of these subsectors. Performing arts and spectator sports was the largest services providing industry in the top 10, with 1,203 workers in 2018.

Kent County

Industry Name	2018	OTY%
	Employment	
Ambulatory health care services	403	17.2
Building material and garden supply stores	92	12.2
Accommodation	105	7.1
Nursing and residential care facilities	493	6.2
Chemical manufacturing	325	4.8
Specialty trade contractors	255	4.5
Administrative and support services	221	4.2
Crop production	148	1.4
Personal and laundry services	90	1.1
Food and beverage stores	373	0.8

Employment in Kent County shifted towards goods producing from 2017 to 2018, with an overall net gain of 57 workers in private employment, 78 of which were added in goods producing industries. Workers in Kent County goods producing industries earned average weekly wages of \$960, \$220 more than their counter parts in services providing industries. For every worker in goods producing industries, there were 3.2 workers in services providing industries in 2018, down from 3.4 services providing workers to each goods producing worker in 2017.

Kent County's fastest growing industries were quite diverse in 2018, with only two sectors having more than one industry in the top 10. Retail trade subsectors Building materials and garden supply stores and Food and beverage stores accounted for 465 workers in 2018. Healthcare and social assistance employed 896 workers in the Ambulatory healthcare services and Nursing and residential care facilities subsectors. Three of the 10 subsectors were in the goods producing domain, representing 728 workers in Manufacturing, Construction, or Agriculture, forestry, fishing, and hunting sectors.

Montgomery County

Industry Name	2018 Employment	OTY%
Warehousing and storage	572	100.0
Rental and leasing services	2,062	63.1
Couriers and messengers	1,182	37.0
Museums, historical sites, zoos, and parks	220	32.5
Crop production	124	27.8
Data processing, hosting and related services	917	25.4
Beverage and tobacco product manufacturing	311	21.0
Merchant wholesalers, nondurable goods	2,263	18.4
Funds, trusts, and other financial vehicles	134	16.5
Furniture and related product manufacturing	129	11.2

The addition of 2,599 jobs from 2017 to 2018 represented a 0.7 percent growth in private employment for Montgomery County. The 380,823 private employees earned an average weekly wage of \$1,377. Employment growth was driven by services providing industries with 2,433 new jobs coming to services providing firms.

Thirty-seven industry subsectors in Montgomery County posted over the year gains in private employment. Workers in these 37 subsectors earned an average weekly wage of \$1,434 - \$57 more than the average private employee. Warehousing and storage doubled its workforce from 2017 to 2018. Along with Couriers and messengers, there were 1,754 workers in Transportation and warehousing subsectors in Montgomery County's top 10 fastest growing industries. The Wholesale trade subsector Merchant wholesalers of nondurable goods employed 2,263 workers in 2018, making it the largest of the top 10. Seven of the 10 subsectors came in the services providing domain. The three goods producing sectors were Crop production, Beverage and tobacco product manufacturing, and Furniture and related product manufacturing.

Prince George's County

Industry Name	2018	OTY%
	Employment	
Warehousing and storage	1,777	19.6
Truck transportation	1,706	14.9
Chemical manufacturing	345	13.5
Computer and electronic product manufacturing	709	12.5
Wood product manufacturing	134	11.7
Educational services	4,000	11.0
Textile product mills	127	10.4
Nonmetallic mineral product manufacturing	487	8.5
Management of companies and enterprises	1,793	8.4
Securities, commodity contracts, investments	122	7.0

Private employment in Prince George's County shifted toward services providing industries, with a net overall gain of 357 workers from 2017 to 2018. Services providing industries added 444 workers from 2017 to 2018. The growth rate for both services providing and all industries was 0.2 percent.

Despite a small decline in goods producing industries overall, 10 of the 36 Prince George's growing industry subsectors were within the goods producing domain. Furthermore, half of the top 10 fastest growing industries in Prince George's County were from the Manufacturing sector. There were 1,802 workers in the Chemical manufacturing, Computer and electronic product manufacturing, Wood product manufacturing, Textile product mills, and Nonmetallic mineral product manufacturing subsectors. Warehousing and storage and Truck transportation combined to add 872 workers from 2017 to 2018, or 17.2 percent.

Queen Anne's County

Industry Name	2018 Employment	OTY%
Heavy and civil engineering construction	210	69.4
Gasoline stations	199	19.2
Administrative and support services	654	11.8
Food services and drinking places	2,481	10.9
Motor vehicle and parts dealers	203	7.4
Merchant wholesalers, durable goods	748	7.2
Food manufacturing	153	6.2
Ambulatory health care services	713	4.5
Health and personal care stores	138	3.0
Membership associations and organizations	186	2.8

Strong growth in goods producing industries (5.3 percent) and growth in the larger services providing domain (2.7 percent) lead to a growth of 3.2 percent in Queen Anne's County's private employment, an addition of 389 workers. The 12,466 workers earned an average weekly wage of \$755. Though nearly a quarter of the size of the larger services providing domain, the goods producing domain added about half as many jobs (126 new goods producing jobs versus 263 new services providing jobs).

There were 23 industry subsectors with over the year private employment growth. Four of these subsectors were in the goods producing domain. After adding 86 workers from 2017 to 2018, the Construction subsector Heavy and civil engineering construction was the fastest growing industry subsector in Queen Anne's County, at a growth rate of 69.4 percent. Food manufacturing was the only other goods producing industry in the top 10. Retail trade was the most represented sector of the services providing domain, with three subsectors, Gasoline stations, Motor vehicle and parts dealers, and Health and personal care stores.

Saint Mary's County

Industry Name	2018	OTY%
	Employment	
Miscellaneous store retailers	254	23.3
Food and beverage stores	1,294	11.7
Motor vehicle and parts dealers	684	11.6
Management of companies and enterprises	155	11.5
Administrative and support services	1,064	10.0
Fabricated metal product manufacturing	136	7.9
General merchandise stores	1,136	6.0
Educational services	533	5.5
Support activities for transportation	1,490	5.4
Specialty trade contractors	1,305	5.2

From 2017 to 2018, private employers in Saint Mary's County added 480 new jobs, a 1.6 percent growth. Growth was driven by gains in the services providing domain, where over 90 percent of private workers were employed. While most of the gains came from the services providing domain - 413 workers- goods producing had a proportionately higher growth accounting for 14 percent of the gains while only accounting for eight percent of private employment in 2018.

Twenty-one of the 27 industry subsectors with over the year private employment growth were in the services providing domain. Nearly half of the top 10 fastest growing industries in Saint Mary's County were in the Retail trade sector as 3,368 workers were employed across Miscellaneous store retailers, Food and beverage stores, Motor vehicle and parts dealers, and General merchandise stores. Only two of the top 10 fastest growing industries were goods producing, Fabricated metal product manufacturing and Specialty trade contractors combined to add 75 workers between 2017 and 2018.

Somerset County

Industry Name	2018	OTY%
	Employment	
Professional and technical services	143	47.4
Membership associations and organizations	106	9.3
Food and beverage stores	172	3.6
Ambulatory health care services	342	3.6
Insurance carriers and related activities	92	3.4
Animal production and aquaculture	81	2.5

Somerset County private employers grew by a net of 0.7 percent over the year. This growth was driven entirely by the services providing sector with 38 new employees from 2017 to 2018, indicating a slight shift in employment from goods producing industries to services providing industries.

Somerset County had six industries with over the year growth from 2017 to 2018, and 2017 employment above 75 workers. Animal production and aquaculture was the lone goods producing industry in this group, employing 81 workers in 2018. It should be noted that there were 14 total industry subsectors with over the year growth in Somerset County, with 13 in the services providing domain.

Talbot County

Industry Name	2018 Employment	OTY%
Heavy and civil engineering construction	179	46.7
Credit intermediation and related activities	217	26.2
Building material and garden supply stores	389	19.3
Support activities for transportation	87	13.0
Construction of buildings	277	6.5
Sports, hobby, music instrument, book stores	144	5.9
Specialty trade contractors	623	5.8
Real estate	206	5.6
Repair and maintenance	303	5.6
Amusements, gambling, and recreation	435	4.8

Despite making up only 10 percent of private employment, growth in the goods producing domain nearly balanced out a decline in services providing jobs. The total net change rate for Talbot County's private employment was relatively flat at 0.1 percent over the year, a decline of 15 jobs.

Of 23 industry subsectors with over the year growth in 2018, three were goods producing, specifically in the Construction sector. All three subsectors of the Construction sector were in Talbot County's top 10 fastest growing industries. Specialty trade contractors was the largest industry in the top 10 fastest growing, with 623 workers in 2018. Two of the seven services providing subsectors were in the Retail trade sector: Building material and garden supply stores and Sports, hobby, music instrument, and book stores.

Washington County

Industry Name	2018 Employment	OTY%
Beverage and tobacco product manufacturing	410	20.9
Merchant wholesalers, nondurable goods	961	17.6
Food manufacturing	423	9.9
Fabricated metal product manufacturing	690	7.8
Truck transportation	1,430	7.5
Repair and maintenance	503	7.5
Machinery manufacturing	1,977	6.0
General merchandise stores	1,735	5.5
Waste management and remediation services	211	5.5
Miscellaneous store retailers	593	5.3

The goods producing domain in Washington County added 324 private jobs from 2017 to 2018. It grew at an over the year rate of 3.5 percent.

Twenty-eight total industry subsectors had over the year growth. Ten of these subsectors were goods producing. Four manufacturing subsectors represented all the goods producing industries in the top 10 fastest growing subsectors. Beverage and tobacco product manufacturing, Food manufacturing, Fabricated metal product manufacturing, and Machinery manufacturing combined to employ 3,500 workers in 2018. General merchandise stores, the largest services subsector in the top 10, employed 1,745 workers in 2018.

Wicomico County

Industry Name	2018 Employment	OTY%
Educational services	472	24.9
Transit and ground passenger transportation	166	19.4
Accommodation	488	17.3
Computer and electronic product manufacturing	457	14.2
Amusements, gambling, and recreation	350	10.8
Couriers and messengers	267	10.3
Specialty trade contractors	1,738	8.2
Electrical equipment and appliance mfg.	93	6.9
Miscellaneous store retailers	303	4.8
Beverage and tobacco product manufacturing	251	4.6

Private employers in Wicomico County added 279 workers between 2017 and 2018, an over the year growth rate of 0.8 percent. This growth was almost equally distributed between goods producers and service providers. Due to its smaller relative size, the growth rate in the goods producing domain was 2.5 percent as compared to 0.5 percent for service providers.

Seven of 25 Wicomico subsectors with over the year growth were in the goods producing domain. In the top 10 fastest growing subsectors, four were goods producing. The Construction subsector Specialty trade contractors employed 1,738 workers after an over the year growth of 8.2 percent. The three manufacturing subsectors combined to employ 800 workers in 2018. Accommodation was the largest services providing industry in the top 10.

Worcester County

Industry Name	2018 Employment	OTY%
Administrative and support services	640	10.0
Amusements, gambling, and recreation	1,160	9.4
Real estate	626	9.1
Insurance carriers and related activities	87	8.8
Nursing and residential care facilities	635	8.2
Gasoline stations	136	7.1
Construction of buildings	329	6.8
Ambulatory health care services	779	6.6
Accommodation	2,573	4.9
General merchandise stores	884	4.5

Worcester County saw over the year gains in private employment of 0.5 percent, or 116 workers. Most of these gains came from the services providing domain, where 91 new workers were added.

Two thirds of the subsectors with over the year gains in private employment were services providing industries. In the top 10 fastest growing industry subsectors, highlights include the Accommodation and Food Services Sector and the Arts, entertainment, and recreation sector, where there were sizeable gains in very large subsectors. Amusements, gambling, and recreation grew at a rate of 9.4 percent to a 2018 employment of 1,160. A growth rate of 4.9 percent brought Accommodation employment to a 2018 level of 2,573 workers in 2018. Construction of buildings was the lone goods producer in the top 10. Overall, seven goods producing industry subsectors saw over the year growth.

Data-driven career suggestions

The Hot Jobs Index discussed in this section is intended to offer accessible information to help individuals compare how likely occupations are to provide a steady career. This section explores why and how the Maryland Department of Labor's Office of Workforce Information and Performance (OWIP) created this pilot index and reviews initial findings for individuals with lower educational attainment.

OWIP often fields questions regarding the outlook for various occupations. There are many sources of occupational data, but pulling the information together and interpreting it requires extensive content knowledge. To address this demand for synthesized occupational outlook information, OWIP developed an improved methodology to evaluate occupations. The resulting index, discussed below, is still in development and is part of a broader, ongoing effort to make insights from our data more widely accessible.

Methods and data sources overview

The Hot Jobs index takes into account current wages and job openings, projected job growth and openings, and a measure of the relative demand for an occupation in the region.^{1,2} These statistics are normalized, and the normalized values are combined to create the Hot Jobs index. The higher the ranking, the more likely it is that an occupation can provide stable, long-term work with good pay.

The weights for the index were determined with this in mind. Wages are double weighted in this index, because wages are a critical component of a stable career. Wages are also an indicator of employer demand for types of workers, as employers are willing to pay a higher wage in areas of need. The online job postings count is half weighted to account for noise in the data. Employers may not create online postings for all jobs, or may create one posting for multiple positions. All other measures received a single weight.

Occupations for which not all data points were available were excluded from the index, with the exception of online job postings. Occupations with no online job postings data were assumed to have zero online postings. Data in other categories would be unavailable typically due to data quality and or confidentiality concerns when an occupation presented too small a sample size for analysis.

The 2016 – 2026 long term occupational projections were used to identify: numeric growth, percentage growth, and total openings. The 2018 Occupational Employment Statistics (OES) release was used to capture the location quotient and median wage for occupations. The Maryland Workforce Exchange provided annual 2018 jobs postings. Annual jobs postings were used to compensate for any seasonal variations in jobs postings.

¹ The selection of these measures and the methodology used was inspired by work done by the Indiana Department of Workforce Development. Their index and a description of their methodology can be found here: http://www.hoosierdata.in.gov/infographics/ranking-methodology.asp.

² Regional relative demand for an occupation is measured using the location quotient for the workforce region. A more detailed description of the location quotient can be found here: https://www.economicmodeling.com/2011/10/14/understanding-location-quotient-2/.

Statewide – Top 10 Hot Jobs Index Occupations by Education level

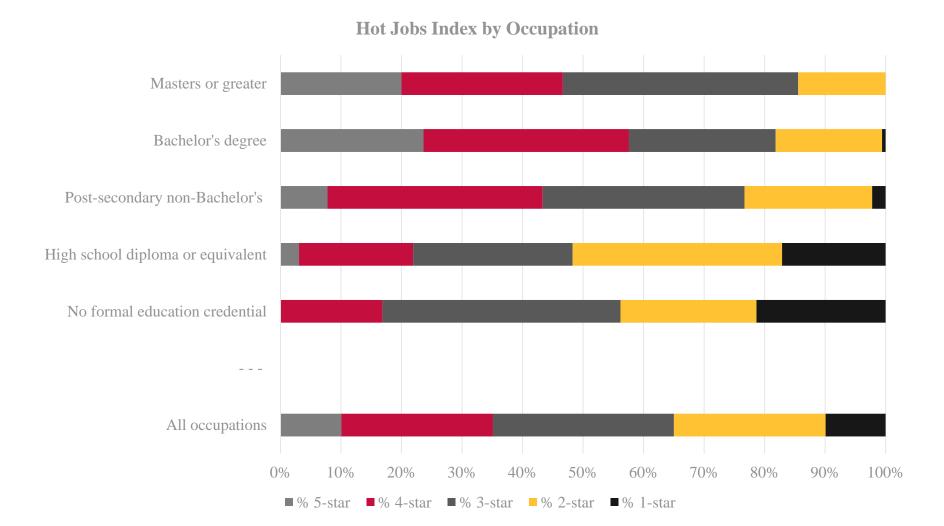
Occupation / Education requirement	Wage (median)	Projected growth	Job Postings
Associate's, Bachelor's or other post-secondary credential			
Medical and Health Services Managers	\$113,200	11.9%	2,263
Registered Nurses	\$75,700	11.5%	49,886
General and Operations Managers	\$119,500	6.9%	5,511
Software Developers, Systems Software	\$118,300	7.5%	4,783
Construction Managers	\$94,800	9.4%	1,105
Network and Computer Systems Administrators	\$102,300	7.8%	9,303
Dental Hygienists	\$89,400	30.5%	439
Chief Executives	\$204,900	10.1%	3,358
Computer Systems Analysts	\$94,100	7.6%	6,520
Computer Network Architects	\$126,500	7.9%	2,923
High school diploma or equivalent			
First-Line Supervisors of Construction Trades	\$68,500	11.0%	333
Sales Representatives, Services, All Other	\$62,700	8.0%	1,478
Executive Secretaries and Executive Admin Assistants	\$67,400	7.2%	8,774
Plumbers, Pipefitters, and Steamfitters	\$57,200	9.8%	880
Telecommunications Line Installers and Repairers	\$69,800	11.7%	154
Electricians	\$54,200	10.2%	1,378
First-Line Supervisors of Office and Admin Workers	\$59,900	6.9%	4,601
Food Service Managers	\$66,100	8.5%	1,010
Carpenters	\$46,300	10.3%	1,301
First-Line Supervisors of Non-Retail Sales Workers	\$75,100	4.9%	424

Less than high school diploma			
Industrial Truck and Tractor Operators	\$37,800	10.3%	1,120
Cement Masons and Concrete Finishers	\$46,000	13.6%	74
Construction Laborers	\$33,600	11.2%	433
Drywall and Ceiling Tile Installers	\$45,400	13.1%	59
Painters, Construction and Maintenance	\$37,300	11.3%	212
Taxi Drivers and Chauffeurs	\$27,200	30.3%	288
Landscaping and Groundskeeping Workers	\$31,000	8.3%	1,338
Roofers	\$46,500	10.0%	172
Cooks, Restaurant	\$27,600	9.0%	2,451
Janitors and Cleaners, Except Maids and Housekeeping	\$26,200	7.9%	2,563

Occupations for workers with a high school diploma or less are available statewide. These occupations generally offer lower wages than occupations with higher education requirements, however, there are occupations in this group that do offer competitive wages, as seen in the table above. The statewide median wage (based on occupation) in 2018 was \$44,692. Of the 10 occupations identified requiring less than a high school diploma, three offered a median wage above the statewide median. All three occupations have strong projected growth through 2026 and current available job openings based on postings to the Maryland Workforce Exchange.

All 10 occupations identified for workers with a high school diploma or equivalent paid a median wage above the statewide median in 2018. Several of these occupations do require extensive on the job training or apprenticeships, making them great targets for workforce development programs.

While the value of educational credentials is made apparent by the table above, access to higher than median wages is possible at any educational attainment level in Maryland. See the chart below for a breakdown of hot jobs index ratings by education level. All education levels had occupations of at least four star ratings, with only occupations requiring less than a high school diploma having no statewide five star rated occupations. Because wages are only a factor in determining a star rating, there are a number of lower rated occupations that still provide access to wages above the median.



Hot jobs by education level and state workforce area

Individuals of all education levels may find their educational attainment limits their career and employment options. In particular, those with a high school equivalency or less may face particular employment challenges. According to the U.S. Census Bureau, the unemployment rate for Marylanders with a high school diploma or less is 8.1 percent, as compared to the total unemployment rate of 5.0 percent.³ With the pilot hot jobs index, occupations accessible to this population are clearly identified. Job or career seekers can see which occupations are accessible for them, and also see future growth potential, current available jobs, and likely wage levels. This section will focus on top opportunities for these individuals in each workforce area around the state.

For each table below, the top five occupations for educational attainment levels through high school diploma are listed. Wage is the workforce area median wage for the indicated occupation, rounded to the nearest \$100. Occupation titles in **bold** indicate occupations where the median occupation wage is greater than the median wage for the workforce area. Projected growth is the long term (2016 – 2026) projected percent growth in employment for the workforce area. Job postings are as of July 30, 2019 and represent job postings collected by the Maryland Workforce Exchange for the calendar year 2018.

Anne Arundel Workforce Area

Anne Arundel County



		Projected	Job
Occupation	Wage	growth	Postings
High school diploma or equivalent			
Sales Representatives, Wholesale and Manufacturing	\$55,500	13.0%	50
Plumbers, Pipefitters, and Steamfitters	\$59,000	15.9%	96
First-Line Supervisors of Mechanics, Installers	\$74,400	9.6%	107
Sales Representatives, Services, All Other	\$56,800	8.9%	117
First-Line Supervisors of Construction and Extraction	\$65,500	9.3%	16
Less than high school diploma			
Combined Food Preparation and Serving Workers	\$20,900	11.7%	544
Cleaners of Vehicles and Equipment	\$24,600	14.4%	82
Cooks, Restaurant	\$27,300	6.8%	350
Construction Laborers	\$32,600	8.2%	54
Retail Salespersons	\$24,000	6.6%	1,815

The average median wage (weighted by 2018 employment) for hot jobs indexed occupations requiring a high school diploma or equivalent in 2018 was \$42,980. These occupations ranged in

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³ As calculated using US Census Bureau's American Community Survey 2017 5-year estimate table B23006. Data is based on a sample and subject to sampling variability.

median wage from \$21,341 (Library assistants, clerical) to \$152,565 (Commercial pilots – while this occupation does not require a college degree, a pilot's license is necessary). The occupation with the

most 2018 job postings was Customer service representatives. Maintenance workers for machinery are projected to have the fastest growth through 2026, with a projected growth rate of 48.3 percent. Personal care aides are projected to add the most workers through 2026, with a projected addition of 366 new positions. When turnover and job replacements are accounted for, there are a projected 6,095 job openings for Customer service representatives through 2026.

All five of the top five hot jobs indexed occupations requiring a high school diploma or equivalent were five-star rated. These



Figure 2 Commercial Pilots earned a median wage of \$152,565 in the Anne Arundel Workforce Area.

occupations had strong wages, growth, and online jobs postings. The average median wage for the top five was \$62,221 - all five had a median wage above the workforce area median. There was a combined 386 online postings for these occupations in 2018, and 9,623 projected openings through 2026 (875 of which are projected to come via economic growth).

Workers in hot jobs indexed occupations requiring less than a high school diploma earned a weighted average median wage of \$24,123. Four of these occupations paid a median wage above the workforce area median of \$42,346: Painters in construction and maintenance (\$45,368), Cement masons and concrete finishers (\$48,466), Butchers and meat cutters (\$44,596), and Motor vehicle operators, all other (\$56,448). While all four of these occupations offered a higher wage, growth and job openings dampened their scores on the hot jobs index.

All five of the top five hot jobs indexed occupations requiring less than a high school diploma had a median wage above the weighted averaged median wage of the category. These occupations were highly rated based on growth openings (2,044 combined jobs projected through 2026), current openings (2,845 combined ads posted in 2018), and projected growth rate through 2026 (average 9.5 percent).



		Projected	Job
Occupation	Wage	growth	Postings
High school diploma or equivalent			
Control and Valve Installers and Repairers	\$55,500	18.2%	164
Sales Representatives, Services, All Other	\$69,200	8.3%	278
Bus and Truck Mechanics and Diesel Engine	\$54,800	9.4%	233
Police and Sheriff's Patrol Officers	\$68,100	3.2%	25
Bus Drivers, Transit and Intercity	\$43,800	6.3%	109
Less than high school diploma			
Laborers and Freight, Stock, and Material Movers, Hand	\$29,900	7.4%	646
Cooks, Institution and Cafeteria	\$32,600	12.5%	48
Combined Food Preparation and Serving Workers	\$21,800	18.9%	219
Construction Laborers	\$35,500	7.3%	74
Cooks, Restaurant	\$29,400	11.7%	456

The average median wage for hot jobs indexed occupations requiring a high school diploma or equivalent in 2018 was \$42,783 – lower than the workforce area median wage of \$48,470 by nearly \$6,000. Detectives and criminal investors were at the top of the earnings range, with a median annual wage of \$133,341. At the other end was Food batch makers, with a median annual salary of \$20,227. Fifty of the 142 hot jobs indexed occupations requiring a high school diploma or equivalent had 2018 median wages above the workforce area median. The occupation with the most 2018 job postings was Customer service representatives, with 2,168 advertisements. Nonfarm animal caretakers is projected to grow the fastest through 2026, with a projected growth rate of 22.3 percent. Personal care aides is projected to add the most new positions, 346 through 2026. Due to rapid turnover, General office clerks are expected the most total openings through 2026, with over 11,000 projected replacement openings.

Four of the top five hot jobs indexed occupations requiring a high school diploma or equivalent had a median wage above that of the workforce area. Bus drivers (transit and intercity) had a median wage of \$43,779, and was highly rated due to a large number of projected total openings through 2026 (3,243 – 159 projected to be from economic growth) and 109 online job postings in 2018. The top three are five star rated and the fourth and fifth are four star rated.

In occupations requiring less than a high school diploma, the weighted average median income was \$25,937. Three of the 43 occupations in this category paid a median wage above the workforce area median: Cement masons and concrete finishers (\$50,981), Roofers (\$48,899), and Artists and related workers (\$77,113). Cement masons and concrete finishers was a top 10 occupation in this educational attainment category based on the hot job index.

With a combined 23,229 projected total openings through 2026 (1,571 projected to come via economic growth), the top five occupations requiring less than a high school diploma were highly rated due to the future prospects of job seekers interested in these occupations. Current job seekers also saw a combined 1,443 job postings for these occupations in 2018. Four out of five had a median wage higher than \$25,937 (the weighted average median for all occupations requiring less than a high school diploma).

Baltimore County Workforce Area Baltimore County



			5 3
		Projected	Job
Occupation	Wage	growth	Postings
High school degree or equivalent			
Sales Representatives, Services, All Other	\$62,300	11.3%	214
Plumbers, Pipefitters, and Steamfitters	\$57,600	16.8%	109
First-Line Supervisors of Const. Trades	\$66,300	9.5%	18
Insurance Sales Agents	\$49,500	10.6%	186
Home Health Aides	\$27,900	39.5%	148
Less than high school degree			
Landscaping and Groundskeeping Workers	\$32,200	10.9%	215
Laborers and Freight, Stock and Movers	\$25,100	13.3%	539
Construction Laborers	\$34,700	7.4%	55
Janitors and Cleaners, Except Maids	\$23,400	10.8%	247
Motor Vehicle Operators, All Other	\$45,500	10.1%	0

The average median wage for all occupations in Baltimore County was \$42,173. Hot jobs indexed occupations with an educational requirement of a high school diploma was \$42,060, very close to the workforce area median. Seventy-one of the 147 occupations requiring a high school diploma earned a median wage higher than the workforce area median. At the top of the earnings range is First-line supervisors of police and detectives with a median annual wage of \$98,758; Childcare workers were at the bottom of the range for median annual wage at \$23,051. Personal care aides is not only the projected fastest grower at 43.8 percent, but is also projected to add the most workers (1,802) during the same time frame. When replacements and turnover are added, Customer service representatives are expected to have the most total openings through 2026.

Four of the top five hot jobs indexed occupations requiring a high school diplomas had a median wage above the workforce area median wage. Home health aides had a median salary of \$27,852, but was highly rated due to very strong projected growth (39.5 percent; 5,010 total openings) through 2026, and current demand (148 job postings in 2018). All of the top five earned a five star rating in the hot jobs index.



Figure 3 Motor vehicle operators, all other includes street cleaning equipment operators.

The weighted average median income for occupations requiring less than a high school diploma is \$25,230. There were eight of the 47 occupations in this category with a median wage that exceeded the workforce area median: Motor vehicle operators, all other (\$45,466), Cement masons and concrete finishers (\$47,975), Parts salespersons (\$43,382), Butchers and meat cutters (\$43,254), Grounds maintenance workers, all other (\$77,898), Pipelayers (\$42,358), Drywall and ceiling tile installers (\$46,587), and Arts and related workers, all other (\$89,696). Motor vehicle operators was a top five occupation in the hot jobs index for this educational attainment group, and Cement masons and concrete finishers was a top 10 rated occupation.

Strong projected growth is the leading factor in the high ratings of the top five hot jobs indexed occupations requiring less than a high school diploma with an average projected growth of 10.5 percent. Through

2026, there are 27,526 projected total combined openings across the top five. Motor vehicle operators, all other was in the top five not only for future growth prospects, but also wages above the workforce area median wage.

Frederick County Workforce Area Frederick County



		Projected	Job
Occupation	Wage	growth	Postings
High school diploma or equivalent			
Telecommunications Line Installers and Repairers	\$81,100	23.8%	2
Loan Interviewers and Clerks	\$51,600	23.8%	18
First-Line Supervisors of Landscaping, Lawn Services	\$47,200	33.2%	15
Sales Representatives, Services, All Other	\$50,600	22.6%	46
First-Line Supervisors and Const. Trades	\$66,400	13.1%	7
Less than high school diploma			
Landscaping and Groundskeeping Workers	\$29,000	29.4%	64
Janitors and Cleaners, Except Maid and Housekeeping	\$26,200	27.5%	138
Industrial Truck and Tractor Operators	\$40,800	16.1%	45
Cooks, Restaurant	\$27,800	13.7%	105
Combine Food Preparation and Serving, Incl. Fast Food	\$22,600	19.7%	176

The weighted average median wage for hot jobs indexed occupations requiring a high school diploma or equivalent was above the median wage for the workforce area (\$43,252 for high school diploma jobs versus \$39,332 for the workforce area). Sixty-eight of 108 occupations had a median wage higher than that of the workforce area. Median wages ranged from \$20,654 (Recreation workers) to \$109,596 (Commercial pilots). Home health aides is projected to be the fastest growing

of occupations requiring a high school diploma, with a growth rate of 41.7 percent. Personal care aides is the occupation expected to add the most positions, with 289 new jobs projected to come from growth through 2026. Customer services representatives is expected to have the most total openings through 2026 (2,798), and also had the most job openings posted in 2018 with 506.

High wages, large projected increases in employment, and a number of total openings drove the ratings for the top five hot jobs indexed occupations requiring a high school diploma or equivalent. All five occupations had a median wage above the workforce area median. The projected growth through 2026 for all five occupations combined is 23.3 percent, with 571 growth openings and 3,640 total openings.

Workers in occupations requiring less than a high school diploma earned a weighted average median wage of \$25,756 in 2018. Five of the 34 occupations did pay a wage higher than the workforce area median: Industrial truck and tractor operators (\$40,776), Roofers (\$48,701), Drywall and ceiling tile installers (\$47,321), Pipelayers (\$43,650), and Cement masons and concrete finishers (\$45,441). Industrial truck and tractor operators was a top three entry in the hot jobs index for occupations requiring less than a high school diploma, and roofers was a top 10 entry.

As mentioned, Industrial truck and tractor operators had a median wage above the workforce area. Three of the four remaining occupations in the top five hot jobs indexed occupations requiring less than a high school diploma had median wages above \$25,756, the weighted average median for occupations requiring this level of education. The average projected growth rate for these top five occupations is 21.3 percent through 2026. Combined, there are a projected 11,068 total openings, 1,398 of which are projected to come from economic growth.

Lower Shore Workforce Area

Somerset, Wicomico, and Worcester Counties



		Projected	Job
Occupation	Wage	growth	Postings
High school diploma or equivalent			
Police and Sheriff's Patrol Officers	\$51,300	13.9%	45
Maintenance and Repair Workers, General	\$34,500	16.3%	36
Lodging Managers	\$64,700	11.6%	12
Sales Representatives, Wholesale and Manufacturing	\$54,000	9.2%	19
Plumbers, Pipefitters, and Steamfitters	\$48,400	18.6%	16
Less than high school diploma			
Maids and Housekeeping Cleaners	\$22,200	11.5%	84
Cooks, Restaurant	\$27,500	5.6%	58
Janitors and Cleaners, Except Maids and Housekeeping	\$24,900	17.4%	53
Combined Food Preparation and Serving, Incl. Fast Food	\$21,200	11.5%	88
Retail Salespersons	\$24,000	9.7%	529

Median annual wages in the Lower Shore Workforce Area are \$32,742. Workers in occupations requiring a high school diploma earned a weighted average median salary of \$37,496, with 74 occupations out of 123 earning a median salary greater than the workforce area median. Transportation, storage, and distribution managers earned a median salary of \$111,080, the highest of occupations requiring a high school diploma; Transportation workers, all other earned the lowest median salary at \$19,974. Home health aides is projected to growth the fastest (56.4 percent through 2026) and add the most jobs due to growth, with 351 through 2026. With



Figure 4 There were 45 online job postings for Police and Sheriff's Patrol Officers in 2018.

turnover and replacements taken into account, Secretaries and administrative assistants are projected to have 1,984 total openings through 2026. Customer service representatives were sought in 282 postings in 2018, making it the occupation with the most job postings.

Strong wages and growth propelled the top five hot jobs rate occupations requiring a high school diploma or equivalent. All five occupations had a median wage above that of the workforce area. Growth projections ranged from 9.2 percent all the way up to 18.6 percent. In these five occupations, there are projected to be 2,535 total openings through 2026, with 329 projected to come as the result of the creation of new positions.

The weighted average median for workers in occupations requiring less than a high school diploma was \$23,290. Two occupations in this category had a median wage above the workforce area median: Industrial truck and tractor operators (\$51,856) and Motor vehicle operators, all other (\$33,103). Both occupations were lower ranked in the hot jobs index due to low projected growth through 2026.

A combined 13,327 projected total openings through 2026 is why the top five hot jobs indexed occupations requiring less than a high school diploma were highly rated. 858 of these openings are projected to come from the addition of new positions. This growth translates to a projected average rate of 11.1 percent. In 2018, there were 812 job postings seeking workers to fill positions in these five occupations.



			N Shad
		Projected	Job
Occupation	Wage	growth	Postings
High school diploma or equivalent			
Sales Representatives, Services, All Other	\$64,700	23.6%	171
Sales Representatives, Wholesale and Manufacturing	\$71,800	14.0%	134
First-Line Supervisors of Non-Retail Sales Workers	\$84,600	14.4%	41
Transportation, Storage, and Distribution Managers	\$98,000	26.9%	142
Production, Planning, and Expediting Clerks	\$48,000	19.4%	197
Less than high school diploma			
Landscaping and Groundskeeping Workers	\$40,400	22.1%	140
Laborers and Freight, Stock, and Material Movers, Hand	\$30,000	16.5%	547
Industrial Truck and Tractor Operators	\$38,000	19.7%	179
Retail Salespersons	\$23,400	8.9%	1,134
Cement Masons and Concrete Finishers	\$46,700	9.7%	1

The weighted average median wage for workers in occupations requiring a high school diploma or equivalent was \$44,251 in 2018, \$1,932 lower than the workforce area median wage. Forty-eight of 115 occupations requiring a high school diploma had median wages above the workforce area median, led by First-line supervisors of police and detectives (median wage \$100,317). At the lower end of the range was Helpers of pipelayers, plumbers, pipefitters, and steamfitters, where the median wage was \$20,463. Couriers and messengers is projected to grow the fastest through 2026, with a projected growth rate of 43.2 percent. Sales representatives, services, all other is expected to add the most positions due to growth through 2026 (1,040). Customer service representatives is projected to have the most total openings through 2026, with 8,735, and also represents the occupation with the most current openings (1,711 postings in 2018).

Workers in the top five occupations requiring a high school diploma or equivalent saw median wages above the median for the workforce area. All five occupations are projected to have very strong growth (14.0 percent was the minimum) through 2026, projected to add a total of 1,842 new positions. With replacements and turnover added, there are projected to be a combined 13,072 total openings in these five occupations through 2026. Employers made 685 posts seeking candidates for these positions across theses five occupations in 2018.

Cement masons and concrete finishers was the only occupation with a 2018 median wage above the Mid-Maryland median wage (\$46,666 versus \$46,183). This occupation is also a top five hot jobs indexed occupation requiring less than a high school diploma. The weighted average median wage for these occupations was \$25,834.

Aside from Cement masons and concrete finishers, which was buoyed into the top five by strong wages, the other four occupations showed stronger projected growth, more projected total openings and heavy current demand. Retail sales persons, the largest of these occupations is projected to add 557 new positions as a part of 9,843 total project openings through 2026. In 2018 alone, there were 1,134 job postings seeking retail workers.

Montgomery Workforce Area

Montgomery County



			S Sand
		Projected	Job
Occupation	Wage	growth	Postings
High school diploma or equivalent			
Property, Real Estate, and Community Managers	\$72,483	8.3%	652
Lodging Managers	\$112,058	15.2%	71
Sales Representatives, Services, All Other	\$70,543	3.4%	248
Food Services Managers	\$85,778	14.6%	200
First-Line Supervisors of Const. Trades	\$71,210	9.2%	39
Less than high school diploma			
Landscaping and Groundskeeping Workers	\$31,360	10.6%	163
Janitors and Cleaners, Except Maids and Housekeeping	\$26,017	11.1%	371
Combined Food Preparation and Serving, Incl. Fast Food	\$23,848	23.0%	688
Food Servers, Nonrestaurant	\$29,245	13.5%	120
Cooks, Institution and Cafeteria	\$32,966	15.4%	70

The weighted average median wage for worker in occupations requiring a high school diploma or equivalent was \$46,125, nearly \$9,000 lower than the workforce area median wage of \$54,994. The range of median wages for these occupations was \$22,804 (Locker room, coatroom, and dressing room attendants) to \$126,056 (Detectives and criminal investigators). Through 2026, the projected fastest growing occupation is Home health aides (40.0 percent projected growth). Personal care aides is projected to add the most jobs from growth, 959, through 2026. Despite overall projected contraction in the number of Secretaries and administrative assistants (except legal, medical, and executive), replacement and turnover will generate over 9,650 total projected openings through 2026. A related occupation, Executive secretaries and executive administrative assistants, had the most job postings in 2018, with 2,226 job advertisements.

The top five hot jobs indexed occupations requiring a high school diploma or equivalent all had a median wage higher than the workforce area median wage. Sales representatives, services, all other had a projected growth rate of 3.4 percent, the lowest of the top five. This modest growth rate was balanced out by the size of the occupation, as the 3.4 percent growth translates to 218 growth openings. In addition, there were 7,813 projected total openings through 2026. Property, real estate, and community association managers had a five star rating in the hot jobs index.



Figure 5 Three food services related occupations made the top five hot jobs index for Montgomery Workforce Area.

Workers in occupations requiring less than a high school diploma earned a weighted median wage of \$26,635 in 2018. There was one occupation which exceeded the workforce area median, Artists and related workers, all other, which had a median wage of \$92,575. This occupation ranked fifteenth in the hot jobs index for occupations requiring less than a high school diploma due to projected employment contraction and low current demand (one job posting in 2018).

The top five hot jobs indexed occupations had growth rates exceeding 10 percent. The average growth rate for these occupations was 14.7 percent. Three of the top five had a median wage above the average median wage of all occupations

requiring less than a high school diploma: Landscaping and groundskeeping workers, Food servers, Nonrestaurant, and Cooks, institution and cafeteria. Combined food preparation and serving workers, including fast food had projected total openings of 22,808, with a projected growth of 2,335 jobs.

Prince George's Workforce Area Prince George's County



			R
		Projected	Job
Occupation	Wage	growth	Postings
High school diploma or equivalent			
Detectives and Criminal Investigators	\$122,824	18.5%	63
First-Line Supervisors of Const. Trades	\$81,437	7.1%	71
First-Line Supervisors of Mechanics, Installers	\$77,065	9.0%	186
Bus and Truck Mechanics and Diesel Engine	\$59,971	10.9%	197
Plumbers, Pipefitters, and Steamfitters	\$58,937	8.9%	109
Less than high school diploma			
Combined Food Preparation and Serving, Incl. Fast Food	\$23,674	15.9%	521
Amusement and Recreation Attendants	\$19,859	15.3%	20
Laborers and Freight, Stock, and Material Movers, Hand	\$25,575	6.1%	571
Janitors and Cleaners, Except Maids and Housekeeping	\$27,818	10.2%	228
Cement Masons and Concrete Finishers	\$48,039	7.3%	20

The workforce area median wage for the Prince George's workforce area was \$45,878 in 2018. Workers in occupations requiring a high school diploma or equivalent earned a weighted average median wage of \$45,761, just \$117 less than the workforce area median. Sixty-nine of the 146

occupations in this category had a median wage higher than \$45,878. The highest paying occupation was Detectives and criminal investigators, with a median wage of \$122,824; at the bottom of the wage range was Recreation workers with a median wage of \$19,857. The occupation projected to grow the fastest through 2026 is Home health aides, projected to grow by 43.3 percent. Light truck and delivery drivers is projected to add the most positions due to economic growth, with a projected gain of 464 new positions through 2026. Due to projected economic growth, and high turnover, Office clerks, general is projected to have the most total openings though 2026, with over 6,000. There were 1,489 job postings seeking Customer service representatives in 2018.

All of the top five hot jobs for occupations requiring a high school diploma or equivalent have wages above the workforce area median. All five were five star rated. Strong wages and projected growth that averaged 10.9 percent through 2026 made these occupations highly rated. Additionally, there are 8,398 total openings through 2026 combined across these five occupations.

Median wages for occupations requiring less than a high school diploma had a weighted average of \$25,798. There were six occupations out of 52 with a median wage higher than \$45,878: Cement masons and concrete finishers (\$48,039), Pipelayers (\$48,677), Roofers (\$51,002), Motor vehicle operators, all other (\$56,119), Tile and marble setters (\$60,609), and Material moving workers, all other (\$54,033). Cement masons and concrete finishers was a top five rated occupation requiring less than a high school diploma, and Pipelayers and Roofers were in the top 20.

Of the top five occupations requiring less than a high school diploma, only Cement masons and concrete finishers had a median wage above the workforce area. One other occupation, Janitors and cleaners, except maids and housekeeping cleaners, had a median wage above the weighted average median wage for occupations requiring less than a high school diploma. These occupations were highly rated due to projected



Figure 6 Cement masons and concrete finishers had a median wage of \$48,039 in Prince George's Workforce Area.

growth averaging almost 11.0 percent through 2026, combined total openings of 39,271 through 2026 (2,588 of which a projected to come from economic growth), and a combined 1,360 job postings in 2018.

Calvert, Charles, and Somerset Counties



Occupation	Wage	Projected growth	Job Postings
·	vvage	giowtii	rustiligs
High school diploma or equivalent			
First-Line Supervisors of Mechanics, Installers	\$64,400	14.2%	32
First-Line Supervisors of Office and Admin Workers	\$52,500	29.7%	174
First-Line Supervisors of Const. Trades	\$74,600	12.1%	6
First-Line Supervisors of Police and Detectives	\$94,400	15.3%	0
Electricians	\$56,400	14.6%	42
Less than high school diploma			
Janitors and Cleaners, Except Maids and Housekeeping	\$30,200	20.0%	70
Maids and Housekeeping Cleaners	\$22,700	63.1%	48
Retail Salespersons	\$22,700	5.3%	684
Cooks, Institution and Cafeteria	\$31,800	42.1%	5
Landscaping and Groundskeeping Workers	\$28,000	15.0%	48

Workers in occupations requiring a high school diploma or equivalent earned a weighted average median wage of \$41,259. Fifty-three out of 113 occupations had a median wage higher than the workforce area median of \$43,469. The range of median wages started at \$20,757 (Childcare workers) and went up to \$114,271 (Transportation, storage, and distribution managers). Bill and account collectors is projected to grow by 240.4 percent through 2026, making it the fastest growing occupation requiring a high school diploma or equivalent. With a projected gain of 567 positions through 2026, Medical secretaries is the occupation with the highest number of projected growth openings. Secretaries and administrative assistants (except legal, medical, and executive) is projected to have modest growth through 2026, but with high replacement and turnover, there are 2,855 projected total openings in this occupation. There were 369 job postings for Customer service representatives in 2018.

The average projected growth rate for the top five hot jobs requiring a high school diploma was 17.2 percent. All five had a median wage above the workforce area median. While 2018 job postings were on the low end, projected total openings through 2026 were high in all occupations, totaling nearly 5,000 combined. Of the 4,980 total projected openings through 2026, 765 are projected to happen due to economic growth.

Cement masons and concrete finishers was the only occupation requiring less than a high school diploma with a median wage -\$48,713- higher than the workforce area median (\$43,469). This occupation was not highly rated in the hot jobs index due to low projected growth openings (13 through 2026) and low current demand (two online postings in 2018). All occupations requiring less than a high school diploma had a weighted average median wage of \$23,819.

Three of the top five hot jobs rated occupations requiring less than a high school diploma had a median wage above \$23,819 (the weighted average median wage for occupations requiring less than a high school diploma). Maids and housekeeping cleaners was rated in the top five due to very strong projected growth (63.1 percent and 378 new positions through 2026). Retail sales persons was highly rated due to large projected gains in employment (248 job gains projected through 2026 as part of 7,108 projected total openings) and high current demand (684 online jobs postings in 2018).

Susquehanna Workforce Area

Cecil and Harford Counties



			R gerry
		Projected	Job
Occupation	Wage	growth	Postings
High school diploma or equivalent			
Food Service Managers	\$82,600	16.1%	42
First-Line Supervisors of Production and Operating	\$77,100	8.8%	161
Industrial Machinery Mechanics	\$56,900	15.7%	25
Transportation, Storage, and Distribution Managers	\$101,100	12.1%	179
Plumbers, Pipefitters, and Steamfitters	\$56,500	12.5%	30
Less than high school diploma			
Industrial Truck and Tractor Operators	\$38,100	30.0%	244
Laborers and Freight, Stock, and Material Movers, Hand	\$32,400	20.6%	422
Cooks, Restaurant	\$24,400	20.5%	97
Landscaping and Groundskeeping Workers	\$29,800	13.0%	158
Waiters and Waitresses	\$21,100	14.6%	48

Workers in occupations requiring a high school diploma or equivalent earned a weighted average median wage of \$41,363, which was \$1,092 more than the workforce area median wage. Sixty-one of 114 occupations requiring a high school diploma or equivalent had a median wage above \$40,271. The maximum median wage in the category came from Transportation, storage, and distribution managers (\$101,071); the minimum median wage was \$21,564 (Personal care aides). Food batchmakers is projected to grow the fastest, with 55.2 percent growth projected through 2026. The



Figure 7 Plumbers, pipefitters, and steamfitters are expected to grow by 12.5 percent through 2026 in the Susquehanna workforce region.

occupation with the largest growth through 2026 and the most total openings through growth, replacement, and turnover through 2026 is Stock clerks and order fillers with 311 growth openings and 4.367 total openings. Customer service representatives was the most sought after occupation in online postings in 2018, with 592 job advertisements.

All five of the top five hot jobs indexed occupations requiring a high school diploma or equivalent had median wages higher than

the workforce area median of \$40,271. These five occupations averaged a projected growth of 13.0 percent through 2026, translating to 247 growth openings. These growth openings were part of a projected 2,229 total openings through 2026. All five occupations were also rated five stars in the hot jobs index.

There was one occupation requiring less than a high school diploma that had a median wage greater than the workforce area median: Cement masons and concrete finishers earned a median wage of \$42,791. This occupation was also a top 10 hot jobs indexed occupation requiring less than a high school diploma. For this category, the weighted average median wage was \$25,031.

The top five occupations requiring less than a high school diploma are projected to grow by an average of 19.8 percent through 2026. The 1,744 projected growth openings are part of 17,420 total projected openings through 2026. There were 969 job advertisements for positions in these five occupations in 2018.

Upper Shore Workforce Area

Caroline, Dorchester, Kent, Queen Anne's, and Talbot Counties



		Projected	Job
Occupation	Wage	growth	Postings
High school diploma or equivalent			
First-Line Supervisors of Const. Trades	\$59,200	11.9%	8
First-Line Supervisors of Office and Admin. Workers	\$55,600	4.6%	53
Operating Engineers and Other Const. Equip. Ops.	\$44,300	10.3%	22
Insurance Sales Agents	\$48,900	33.3%	12
Carpenters	\$44,6 00	9.0%	57
Less than high school diploma			
Construction Laborers	\$34,200	14.5%	28
Landscaping and Groundskeeping Workers	\$29,100	11.0%	32
Packers and Packers, Hand	\$24,700	25.0%	51
Combined Food Preparation and Serving, incl. Fast Food	\$22,100	20.0%	109
Food Servers, Nonrestaurant	\$22,500	14.0%	12

The median wage for workers in all occupations in the Upper Shore workforce area was \$34,548 in 2018. Workers in occupations requiring a high school diploma or equivalent earned a weighted average median wage of \$38,481. Eighty-six of 131 occupations in this educational attainment category had a median wage higher than the workforce area. The occupation with the highest median wage was Commercial pilots (\$107,696); the lowest median wage was \$19,808 earned by workers in Protective services, all other. Through 2026, the occupation projected to grow the fastest, at a rate of 50.0 percent, is Coating, painting, and spraying machine setters, operators, and tenders. Home health aides is projected to add the most new positions – 200 – though 2026. With turnover and job replacements added to growth, Secretaries and administrative assistants (except legal,

medical, and executive) is projected to have the most total openings through 2026, 2,050. Customer service representatives had the most 2018 online job postings, with 447 captured by the Maryland Workforce Exchange.

All five occupations in the top five hot jobs index for occupations requiring a high school diploma or equivalent (see table above) had median wages higher than the workforce area median wage. The average median wage for these five occupations was \$50,512 – nearly \$16,000 more than the workforce area median. With strong growth in the insurance sales agents occupation (33.3 percent), the top five had an average projected growth rate of 13.8 percent through 2026. Despite lower online job postings in 2018 – 152 – the total openings projected through 2026 were a combined 2,608.



Figure 8 In 2018, there were 57 online job postings seeking carpenters in the Upper Shore workforce region.

Workers in occupations requiring less had a weighted average median wage of \$23,895. Five occupations out of 38 had a wage higher than \$34,548: Painters for construction and maintenance (\$35,870), Industrial truck and tractor operators (\$36,451), Grounds maintenance workers, all other (\$36,132), Motor vehicle operators, all other (\$34,953), and Refuse and recyclable material collectors (\$41,219). Painters for construction and maintenance was in the top 15 of the hot jobs index of occupations requiring less than a high school diploma. The other four occupations were rated lower due to low current demand (based on online postings) and low projected demand (based on 2026 long term projections).

While none of the top five hot jobs indexed occupations requiring less than a high school diploma had a median wage above the workforce area median, three exceeded the weighted average median wage for the category. All five occupations were highly rated due to projected growth, with the average projected growth in the five occupations was 16.9 percent. In 2018, there were 232 online job postings in these five occupations.

Western Maryland Workforce Area

Allegany, Garrett, and Washington Counties



		Projected	Job
Occupation	Wage	growth	Postings
High school diploma or equivalent			_
First-Line Supervisors of Production and Operating	\$58,500	8.8%	162
Sales Representatives, Wholesale and Manufacturing ⁴	\$50,000	19.0%	28
Light Truck or Delivery Services Drivers	\$35,400	20.4%	156
Plumbers, Pipefitters, and Steamfitters	\$51,300	13.5%	50
Installation, Maintenance, and Repair Workers	\$42,700	13.0%	18
Less than high school diploma			
Laborers and Freight, Stock, and Material Movers, Hand	\$31,800	14.8%	477
Retail Salespersons	\$23,000	17.5%	694
Combined Food Preparation and Serving, incl. Fast Food	\$20,500	22.9%	88
Cooks, Restaurant	\$24,000	18.1%	130
Construction Laborers	\$32,300	10.3%	14

Workers in occupations requiring a high school diploma or equivalent earned a weighted average median wage of \$37,114 – \$1,428 higher than the workforce median wage of \$35,686. The median salaries ranged from \$19,784 (Production workers, all other) to \$91,049 (Transportation, storage, and distribution managers). Transportation workers is projected to grow by 50.0 percent through 2026, making it the fastest growing occupation requiring a high school diploma or equivalent. Customer service representatives led in three categories: most projected positions added (349 through 2026), most total openings (3,441 through 2026), and most online job ads in 2018 (648).

Four of the top five hot jobs indexed occupations requiring a high school diploma or equivalent had a median wage above the workforce area median. These occupations are projected to grow by an average of 14.9 percent through 2026 and to have a projected total openings count of 4,752 jobs. Light truck or delivery services drivers, the only occupation with a median wage below the workforce area median, had a median wage only \$258 below the workforce area median. This occupation did however, have the highest projected growth percentage and the most online job postings in the top five.

Four occupations requiring less than a high school diploma had a median wage higher than the workforce area median: Roofers (\$36,601), Cement masons and concrete finishers (\$36,662), Industrial truck and tractor operators (\$37,244), and Painters for construction and maintenance (\$38,454). Roofers and Cement masons and concrete finishers were both in the top 10 of the hot jobs index for occupations requiring less than a high school diploma; Industrial truck and tractor operators was in the top 15.

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⁴ Except Technical and Scientific Products

The top five hot jobs indexed occupations requiring less than a high school diploma were all projected to grow by at least 10 percent through 2026. In 2018, there were a combined 1,403 online job postings for these occupations.

Conclusion

Maryland's economy continues to grow 10 years after the end of the Great Recession. Gains in employment are happening across the state in a variety of industries. This diversity of the labor market is a positive in that it increases economic resilience in the state. A strong public sector helped soften the blow of the Great Recession, and continues to be an economic driver well after the Great Recession.

Growth in the goods producing domain was driven by two construction subsectors – Construction of buildings and Specialty trade contractors – and one manufacturing subsector – Computer and electronic product manufacturing. These three subsectors employed a combined 166,437 workers in 2018, and paid average weekly wages nearing \$1,400. 4,235 new employees found a job in these three sectors between 2017 and 2018. Overall, 18 subsectors in the goods producing domain showed growth from 2017 to 2018.

At every educational attainment level there are promising career opportunities for Marylanders across the state. The value of a high school diploma or equivalent is made apparent by viewing the weighted average median salaries for hot jobs requiring a high school diploma and comparing it to the weighted average median salaries for hot jobs requiring less than a high school diploma. Despite the difference, there are still opportunities for employment for those without a high school diploma or equivalent. Many occupations with very high wages that only require a high school diploma or equivalent are dependent on promotions within an occupation group, and workers adding skills and experience throughout their careers. Several of the higher paying occupations are in a supervisory capacity, indicating some mastery of the occupation and leadership skills are necessary to move up the career ladder and earn higher wages while continuing a career with a high school diploma or equivalent.

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Other Helpful Resources

LMI Central

https://lmi.workforcegps.org/

Maryland Growth Occupation Tool (GOT) and Growth Industry Tool (GIT) http://www.labor.martyland.gov/lmi/wiagrowthind/

Maryland LMI Homepage

http://www.labor.maryland.gov/lmi/

Maryland Workforce Exchange https://mwejobs.maryland.gov/vosnet/Default.aspx

North American Industry Classification System (NAICS) http://www.bls.gov/iag/tgs/iag_index_naics.htm

O*NET (Standard Occupational Classifications (SOC)) http://www.onetonline.org/

Projections Central http://www.projectionscentral.com/

Appendix A – NAICS Hierarchy

Agriculture, forestry, fishing and hunting Agriculture and forestry and logging and farming Agriculture and department of the polity and against a forming Agriculture and department of the polity and against a forming Agriculture and department of the polity and against a forming Agriculture and forestry support activities for agriculture and trapping Agriculture and forestry support activities for agriculture and trapping Agriculture and forestry support activities for agriculture and trapping Agriculture and forestry support activities for agriculture and trapping Agriculture and forestry support activities for agriculture and trapping Agriculture and forestry support activities for agriculture and trapping Agriculture and forestry support activities for agriculture and trapping Agriculture and forestry agriculture and forestry support activities for agriculture and trapping Agriculture and forestry and forestry and forestry agriculture and forestry and forestry and forestry agriculture agriculture and forestry and for	t NAICS	% Change	3 Digit NAICS	% CI	nange	4 Digit NAICS	%	Cha	ange
Fruit and tree nut farming Genhouse and nursery production Debte crop farming Animal production and aquaculture Animal production Debte crop farming Debte crop production Support activities for production Support activities for animal prod	ulture, forestry, fishing and hunting	a 0.	9 Crop production	_	4.0	Oilseed and grain farming	_		4.0
Fruit and tree nut farming Grehouse and nursery production Deber crop farming Animal production and aquaculture Animal production Other crop farming Debut y and egg production Other ammal production Other ammal production Other ammal production Other ammal production V Agriculture and forestry support activities Agriculture and forestry support activities V 4-13 Support activities for production Support activities for animal production V Support activities for animal production Support activities for animal production Support activities for animal production V Support activities for animal production S						Vegetable and melon farming	W	,	-14.3
Animal production and aquaculture Animal production and aquaculture Animal production Errestry and logging Fishing, hunting and trapping Agriculture and forestry support activities 4 -4.1 Support activities for animal production Support activities for animal pr							<u> </u>		0.0
Animal production and aquaculture Animal production Perestry and logging Fishing, hunting and trapping Fishing, hunting and trapping Agriculture and forestry support activities for can production Support activities for animal production Support activities for forestry Agriculture and forestry Agriculture and forestry support activities for can production Support activities for forestry Agriculture and forestry support activities for can production Support activities for forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry support activities for can production Agriculture and forestry support activities for forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry Agriculture and forestry support activities for can product activities for can product activities for forestry Agriculture and forestry and support activities for robust activities for robust activities for can product activities for forestry Agriculture and forestry activities for can product activities for animal product and forestry activities for forestry Agriculture and forestry activities for can product activities for animal product activities for can product activities for can product activities for anima						Greenhouse and nursery production	_		1.0
Animal production and aquaculture Animal production Perestry and logging Fishing, hunting and trapping Fishing, hunting and trapping Agriculture and forestry support activities for can production Support activities for animal production Support activities for forestry Agriculture and forestry Agriculture and forestry support activities for can production Support activities for forestry Agriculture and forestry support activities for can production Support activities for forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry support activities for can production Agriculture and forestry support activities for forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry Agriculture and forestry support activities for can product activities for forestry Agriculture and forestry Agriculture and forestry support activities for can product activities for can product activities for forestry Agriculture and forestry and support activities for robust activities for robust activities for can product activities for forestry Agriculture and forestry activities for can product activities for animal product and forestry activities for forestry Agriculture and forestry activities for can product activities for animal product activities for can product activities for can product activities for anima						Other crop farming	_		135.2
Poultry and egg production Other animal production Oth			Animal production and aquaculture	_	0.2		<u> </u>		0.4
Forestry and logging Fishing, hunting and trapping Agriculture and forestry support activities Fishing, hunting and trapping Agriculture and forestry support activities Fishing, hunting and trapping Agriculture and forestry support activities Fishing		-							1.3
Forestry and logging 3.5 Logging 1.8 Fishing 1.8 F							_	,	-1.4
Fishing, hunting and trapping Agriculture and forestry support activities Agriculture and forestry support activities Agriculture and forestry support activities Agriculture and forestry support activities for arinnial production Support activities for arinnial production Support activities for forestry Agriculture for a construction Mining, except oil and gas Support activities for inming Ool Oil and gas extraction Mining, except oil and gas Support activities for mining Nonmetallic mineral mining and quarrying Non		1	Forestry and logging	~	-3.5		_	,	-6.3
Agriculture and forestry support activities Agriculture and forestry support activities Agriculture and forestry support activities 4.1 Support activities for crop production Support activities for rorestry Mining, quarrying, and oil and gas extraction Mining, except oil and gas 4.0 Coal mining Mining, except oil and gas Support activities for mining 5. Support activities for mining 4.0 Do I and gas extraction Mining, except oil and gas Support activities for mining 4.0 Do I and gas extraction Mining and tapping Anomatalic mineral mining and quarrying Nonematalic mineral mining and quarrying Nonematalic mineral mining and quarrying Power generation and supply Natural gas distribution Water, sewage and other systems ACCONSTRUCTION Nonematic mining Matural gas distribution Water, sewage and other systems ACCONSTRUCTION Nonematic mining Water, sewage and other systems ACCONSTRUCTION Water, sewage and other systems ACCONSTRUCTION Nonematic mining Water, sewage and other systems ACCONSTRUCTION Water sewage				~			-	,	-25.4
Agriculture and forestry support activities with a support activities for crop production Support activities for forestry production Support activities for forestry with support activities for fining with support activities for fining and pacturing and processing support activities for fining and process and activities for fining and support activities for fining			Trisming, marring and diapping		10.5				0.0
Mining, quarrying, and oil and gas extraction Mining, except oil and gas Monmetallic mineral mining and quarrying Monterallic mineral mining and processing Monterallic mineral mining an			Agriculture and forestry support activities	_	-4 1		-	,	-3.0
Mining, quarrying, and oil and gas extraction Mining, quarrying, and oil and gas extraction Mining, quarrying, and oil and gas extraction Mining, except oil and gas Support activities for mining Support supp			Agriculture und forestry support detivities	14.	4.1		_	,	-4.4
Mining, quarrying, and oil and gas extraction		ing and hunting 19		-	,	-15.8			
Mining, except oil and gas Willities Utilities Utili	ag guarrying and all and gas extraction	- 2	7 Oil and gas extraction		0.0		•	_	0.0
Construction Cons	ig, quarrying, and on and gas extraction	-2.		-			<u></u>		
Support activities for mining 0.0 Support activities for mining 0.0 Support activities for mining 0.0 Power generation and supply 0.0 Vater, sewage and other systems 0.0 Vater, shealing shear onstruction 0.0 Vater specially trade contractors 0.0 Vater specially trade contractors 0.0 Vater specially trade contractors 0.0 Vater specially 0.0		1	Mining, except on and gas		9.9			h.	121.2
Utilities		1	Command and highland from a classical	-	0.0			_	-3.1
Natural gas distribution Water, sewage and other systems Natural gas distribution Water, sewage and tother systems Natural gas distribution Water, sewage and tother systems Natural gas distribution Water, sewage and tother systems Natural gas distribution Water, sewage distribution Water, s	100m			_					0.0
Construction One process of the pro	es	-0.	4 Utilities		-0.4		-	6	-1.2
Construction A B B B B B B B B B B B B B B B B B B							<u> </u>	4	4.6
Heavy and civil engineering construction	9							6	15.3
Heavy and civil engineering construction -10.3 Land subdivision Highway, street, and bridge construction Other heavy construction Other heavy construction Specialty trade contractors Specialty trade contractors Manufacturing 2.7 Food manufacturing -16 Animal food manufacturing -17 Animal food manufacturing -18 Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing -18 Seafood product preparation and packaging Bakeries and tortilla manufacturing -19 Beverage and tobacco product manufacturing -10 Beverage and tobacco product manufacturing -10 Textile mills -14.3 Validity system construction Land subdivision Near during foundation and exterior contractors Building foundation and exterior contractors -16 Animal fload manufacturing -17 Sugar and confectionery product manufacturing -18 Seafood product preparation and packaging -19 Beverage manufacturing -19 Tobacco manu	ruction	a 0.	6 Construction of buildings	-	0.7		7	*	-2.0
Land subdivision Highway, street, and bridge construction Other heavy construction Specialty trade contractors Description of the peavy construction Specialty trade contractors Description of the peavy construction Specialty trade contractors Building foundation and exterior contractors Building finishing contractors Description of the peavy contractors A suilding finishing contractors A specialty trade contractors Other specialty trade contractors A name food manufacturing Grain and oilseed milling Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Textile mills 10.8 Beverage manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing								h	4.1
Highway, street, and bridge construction Other heavy construction Other heavy construction Specialty trade contractors Desiring equipment contractors Building funishing contractors Building finishing contractors Other specialty trade contractors Other specialty trade contractors Wanufacturing 2.7 Food manufacturing Food manufacturing Animal food manufacturing Grain and oilseed milling Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing			Heavy and civil engineering construction	-	-10.3		-	*	-18.2
Other heavy construction Specialty trade contractors Description of the properties						Land subdivision		*	-10.8
Specialty trade contractors Secialty trade contractors Second product preparation and packaging						Highway, street, and bridge construction	_	i.	3.0
Building equipment contractors Building finishing contractors Other specialty trade contractors Animal food manufacturing Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Beverage and tobacco product manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing		1				Other heavy construction		-	-1.5
Manufacturing 2.7 Food manufacturing 2.7 Food manufacturing 3.8 Food manufacturing 4.6 Animal food manufacturing 5.8 Grain and oilseed milling 5.9 Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing 8. Beverage and tobacco product manufacturing All Severage manufacturing Tobacco manufacturing 7. Textile mills 1. Sebric mills		1	Specialty trade contractors	-	2.6	Building foundation and exterior contractors	<u></u>	k.	3.1
Manufacturing 2.7 Food manufacturing 5.6 Animal food manufacturing Grain and oilseed milling Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and totrilla manufacturing Other food manufacturing Beverage and tobacco product manufacturing Textile mills Other specialty trade contractors Animal food manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and totrilla manufacturing Tobacco manufacturing Tobacco manufacturing Fabric mills						Building equipment contractors	_	4	3.3
Manufacturing 2.7 Food manufacturing 1.6 Animal food manufacturing Grain and oilseed milling Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Beverage and tobacco product manufacturing Textile mills 1.6 Animal food manufacturing Grain and oilseed milling Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Tobacco manufacturing Tobacco manufacturing						Building finishing contractors	_	4	2.3
Grain and oilseed milling Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Beverage and tobacco product manufacturing Tobacco manufacturing Textile mills Grain and oilseed milling Sugar and confectionery product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Other food manufacturing Tobacco manufacturing Tobacco manufacturing Textile mills						Other specialty trade contractors	W	-	-0.9
Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Beverage and tobacco product manufacturing Tobacco manufacturing Textile mills Sugar and confectionery product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Other food manufacturing Tobacco manufacturing Tobacco manufacturing Textile mills	Manufacturing	2.7	Food manufacturing	_	1.6	Animal food manufacturing	<u> </u>		0.0
Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Deverage and tobacco product manufacturing Tobacco manufacturing Textile mills Fruit and vegetable preserving and specialty Dairy product manufacturing Seafood product preparation and packaging Development of the processing Note: Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing						Grain and oilseed milling		h	0.0
Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Deverage and tobacco product manufacturing Tobacco manufacturing Textile mills Fruit and vegetable preserving and specialty Dairy product manufacturing Seafood product preparation and packaging Development of the processing Note: Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing						Sugar and confectionery product manufacturing	<u></u>		4.3
Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Beverage and tobacco product manufacturing Tobacco manufacturing Textile mills Animal slaughtering and processing Seafood product preparation and packaging Tobaccom manufacturing Tobacco manufacturing Tobacco manufacturing Tobacco manufacturing						Fruit and vegetable preserving and specialty	<u>^</u>	h.	10.8
Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Beverage and tobacco product manufacturing 10.8 Beverage manufacturing Tobacco manufacturing Textile mills -14.3 Fabric mills			- 4			Dairy product manufacturing		*	-2.6
Seafood product preparation and packaging Bakeries and tortilla manufacturing Other food manufacturing Beverage and tobacco product manufacturing 10.8 Beverage manufacturing Tobacco manufacturing Textile mills V -14.3 Fabric mills		. 1					<u> </u>		3.5
Bakeries and tortilla manufacturing Other food manufacturing Beverage and tobacco product manufacturing 10.8 Beverage manufacturing Tobacco manufacturing Textile mills Textile mills	Utilities -0.4 Utilities -0.4 Utilities -0.4 Power generation and supply Natural gas distribution Water, sewage and other systems -0.6 Construction of buildings -0.7 Residential building construction Nonresidential building construction Nonresidential building construction -10.3 Utility system construction Land subdivision Highway, street, and bridge construction Other heavy construction Specialty trade contractors -0.6 Building foundation and exterior contractors Building equipment contractors Building finishing contractors Other specialty trade contractors Other specialty trade contractors Sugar and confectionery product manufacturing Grain and oilseed milling Sugar and confectionery product manufacturing Fruit and vegetable preserving and specialty Dairy product manufacturing Animal slaughtering and processing Seafood product preparation and packaging Bakeries and tortill manufacturing Other food manufacturing Beverage and tobacco product manufacturing Textile mills -14.3 Fabric mills Textile furnishings mills		-	,	-9.6				
Other food manufacturing Beverage and tobacco product manufacturing 10.8 Beverage manufacturing Tobacco manufacturing Textile mills -14.3 Fabric mills		1					-	,	-2.0
Beverage and tobacco product manufacturing 10.8 Beverage manufacturing Tobacco manufacturing Textile mills 10.8 Beverage manufacturing Tobacco manufacturing									6.0
Tobacco manufacturing Textile mills Tobacco manufacturing Textile mills			Beverage and tobacco product manufacturing		10.8				10.
Textile mills V -14.3 Fabric mills V					20.0			_	11.
			Textile mills	-	-14 3			,	-5.
				*				,	-2.
			Textile product fillis		-0.5		· ·		0.

2 Digit NAICS	% Change	3 Digit NAICS	% Cł	ange	4 Digit NAICS	9/	% Ch	nange
Manufacturing (con't.)		Apparel manufacturing	~	-19.1	Cut and sew apparel manufacturing	7	W 1	-20.6
		The state of the s			Accessories and other apparel manufacturing	4	4	9.4
		Leather and allied product manufacturing	<u> </u>	9.1	Footwear manufacturing	4	_	10.3
					Other leather product manufacturing	- 4	A	3.
		Wood product manufacturing	<u> </u>	1.0	Sawmills and wood preservation	7	*	-4.0
					Plywood and engineered wood product mfg.	4	<u> </u>	5.8
8 8 8					Other wood product manufacturing	4	<u> </u>	0.5
		Paper manufacturing	~	-0.8	Pulp, paper, and paperboard mills	4	~	-4.6
					Converted paper product manufacturing	4	<u> </u>	0.8
		Printing and related support activities	~	-2.7	Printing and related support activities	7	~	-2.7
		Petroleum and coal products manufacturing	*	-1.5	Petroleum and coal products manufacturing	T	-	-1.5
		Chemical manufacturing	<u> </u>	3.3	Basic chemical manufacturing	*	~	-1.5
					Resin, rubber, and artificial fibers mfg.	7	-	-10.5
					Agricultural chemical manufacturing	*	~	-1.7
					Pharmaceutical and medicine manufacturing	A	<u> </u>	5.3
		_ a			Paint, coating, and adhesive manufacturing	4	A.	7.6
		1			Soap, cleaning compound, and toiletry mfg.	7	~	-11.5
					Other chemical product and preparation mfg.	4	_	9.8
8		Plastics and rubber products manufacturing	_	5.0	Plastics product manufacturing	4	_	5.2
		ii.			Rubber product manufacturing	4	A	1.4
		Nonmetallic mineral product manufacturing	~	-0.2	Clay product and refractory manufacturing	4	-	-19.9
		8			Cement and concrete product manufacturing	4	_	0.8
					Other nonmetallic mineral products	4	A	9.8
		Primary metal manufacturing	_	1.7	Iron and steel mills and ferroalloy mfg.	4	_	0.0
		22			Steel product mfg. from purchased steel	4	<u> </u>	24.3
					Foundries	4	_	0.0
		Fabricated metal product manufacturing	A.	0.5	Forging and stamping	4	~	-10.3
					Architectural and structural metals mfg.	1	A.	2.9
					Boiler, tank, and shipping container mfg.	T	~	-5.7
					Spring and wire product manufacturing	4	_	2.2
					Machine shops and threaded product mfg.	4	<u> </u>	0.0
					Coating, engraving, and heat treating metals	4	<u> </u>	10.3
					Other fabricated metal product manufacturing	4	7	-3.2
		Machinery manufacturing	_	5.5	Ag., construction, and mining machinery mfg.	4	<u> </u>	4.5
					Industrial machinery manufacturing	A	<u> </u>	1.7
					Hvac and commercial refrigeration equipment	4	<u></u>	3.0
					Metalworking machinery manufacturing	4	~	-7.8
		in .			Other general purpose machinery manufacturing	4	<u> </u>	11.2
		Computer and electronic product manufacturing	_	6.6	Computer and peripheral equipment mfg.	4	~	-31.3
					Communications equipment manufacturing	4	_	0.3
					Semiconductor and electronic component mfg.	4	<u> </u>	11.
					Electronic instrument manufacturing	1	<u></u>	9.
		Electrical equipment and appliance mfg.	A.	0.2	Electric lighting equipment manufacturing	-	~	-4.
		, , , , , , , , , , , , , , , , , , , ,	100000		Household appliance manufacturing		_	0.
		a a			Electrical equipment manufacturing	-	-	-1.
		8			Other electrical equipment and component mfg.		<u> </u>	3.

2 Digit NAICS	% Change	e 3 Digit NAICS		ange	e 4 Digit NAICS			ange
Manufacturing (con't.)		Transportation equipment manufacturing	_	8.0	Motor vehicle body and trailer manufacturing	4	Δ	46.8
					Motor vehicle parts manufacturing	4	A	3.
					Aerospace product and parts manufacturing	4	A.	9.6
					Ship and boat building	*	~	-2.
	46				Other transportation equipment manufacturing	A	A	0.0
		Furniture and related product manufacturing	~	-1.2	Household and institutional furniture mfg.	_	<u> </u>	3.9
×					Office furniture and fixtures manufacturing	-		-5.0
		4			Other furniture related product manufacturing	-	~	-3.5
		Miscellaneous manufacturing	_	1.1	Medical equipment and supplies manufacturing	A	<u>A</u>	0.2
					Other miscellaneous manufacturing	A	4	1.8
Wholesale trade	-1.2	Merchant wholesalers, durable goods	_	3.1	Motor vehicle and parts merchant wholesalers	A	A	1.7
	-				Furniture and furnishing merchant wholesalers	4	<u></u>	4.6
		100			Lumber and const. supply merchant wholesalers	4	A.	9.3
					Commercial equip. merchant wholesalers		6	8.1
					Metal and mineral merchant wholesalers	-	7	-0.5
		*			Appliance and electric goods merchant whis.	-		-0.1
					Hardware and plumbing merchant wholesalers		y	-0.9
					Machinery and supply merchant wholesalers		<u> </u>	2.1
		4			Misc. durable goods merchant wholesalers	-	w	-5.0
		Merchant wholesalers, nondurable goods	_	10.0			Δ.	12.7
		merenant unelesaters, nematrazie geeas		10.0	Druggists' goods merchant wholesalers		<u> </u>	37.2
					Apparel and piece goods merchant wholesalers		da.	1.4
					Grocery and related product wholesalers		da.	10.1
					Farm product raw material merch. whis.		A.	17.5
					Chemical merchant wholesalers		A.	10.3
	1	20			Petroleum merchant wholesalers	-	A.	5.2
					Alcoholic beverage merchant wholesalers			-1.2
					Misc. nondurable goods merchant wholesalers		^	7.2
		Electronic markets and agents and brokers		-34.9				-34.9
Retail trade	▼ -1.5	Motor vehicle and parts dealers	_	-0.9			_	
Retail trade	-1.5	Wotor venicle and parts dealers		-0.9			~	-0.4
	1		12		Other motor vehicle dealers		_	-1.8
		Considerate and beauty from inhiness about		77	Auto parts, accessories, and tire stores		_	-2.0
		Furniture and home furnishings stores		-/./	Furniture stores		-	-16.5
					Home furnishings stores		<u> </u>	1.3
		Electronics and appliance stores			Electronics and appliance stores		~	-6.0
		Building material and garden supply stores		1.9	Building material and supplies dealers			1.0
					Lawn and garden equipment and supplies stores			3.
		Food and beverage stores	-	-2.0	Grocery stores		W	-2.
					Specialty food stores			-3.
				10000	Beer, wine, and liquor stores	4	<u> </u>	0.
	1 "	Health and personal care stores	~		Health and personal care stores	*	~	-2.
	=	Gasoline stations	_		Gasoline stations	4	<u> </u>	0.
		Clothing and clothing accessories stores	-	-5.9	Clothing stores	-	-	-7.
					Shoe stores	*	~	-3.
					Jewelry, luggage, and leather goods stores	4	A	1.

2 Digit NAICS	% Change	nge 3 Digit NAICS		% Change 4 Digit NAICS			Change
Retail trade (con't.)		Sports, hobby, music instrument, book stores	-	-7.6	Sporting goods and musical instrument stores	~	-7
					Book stores and news dealers	~	-7
		General merchandise stores	_	1.9	Department stores	_	1
					General merchandise stores, including warehouse clubs and supercenters	_	2
		Miscellaneous store retailers	~	-0.3	Florists	-	-8
					Office supplies, stationery, and gift stores	~	-5
	- 1				Used merchandise stores	~	-1
					Other miscellaneous store retailers	_	. 8
		Nonstore retailers	_	5.8	Electronic shopping and mail-order houses	A	1
					Vending machine operators	~	-4
					Direct selling establishments	_	12
Transportation and warehousing	7.1	Air transportation	_	2.7	Scheduled air transportation	A	2
Page database Notice of Control Contro	14	1	200000		Nonscheduled air transportation	A	23
		Water transportation	-	-4.4	Sea, coastal, and great lakes transportation		6
		Section and the control of the contr			Inland water transportation	_	-5
		Truck transportation	_	2.7	General freight trucking	A	3
					Specialized freight trucking		- 0
		Transit and ground passenger transportation	_	0.9	Urban transit systems		5
					Interurban and rural bus transportation	-	-20
			1		Taxi and limousine service		
					School and employee bus transportation		1
					Charter bus industry	-	-4
					Other ground passenger transportation		2
		Scenic and sightseeing transportation	~	-15.3	Scenic and sightseeing transportation, water		3
	3	Support activities for transportation	_		Support activities for air transportation	A	6
					Support activities for rail transportation	A	7
					Support activities for water transportation	_	8
					Support activities for road transportation	_	-1
		15	1		Freight transportation arrangement		10
					Other support activities for transportation	A	1
		Postal service	~	-10.6	Postal service	~	-10
		Couriers and messengers		7.1	Couriers and express delivery services	A	5
					Local messengers and local delivery	_	17
		Warehousing and storage	_	18.2	Warehousing and storage	A	18
nformation	₹ -3.6	Publishing industries, except internet	A		Newspaper, book, and directory publishers	_	-8
	9 -	, , , , ,			Software publishers		10
	1	Motion picture and sound recording industries	~	-6.0	Motion picture and video industries	-	-5
					Sound recording industries	-	-6
		Broadcasting, except internet	-	-3.9	Radio and television broadcasting		2
		6,			Cable and other subscription programming	-	-13
		Telecommunications	_	-5.0	Wired and wireless telecommunications carriers	-	-1.
				3.0	Satellite telecommunications		43
			8		Other telecommunications		-20
		Data processing, hosting and related services		-2 7	Data processing, hosting and related services	~	-20
		Other information services	-		Other information services	*	

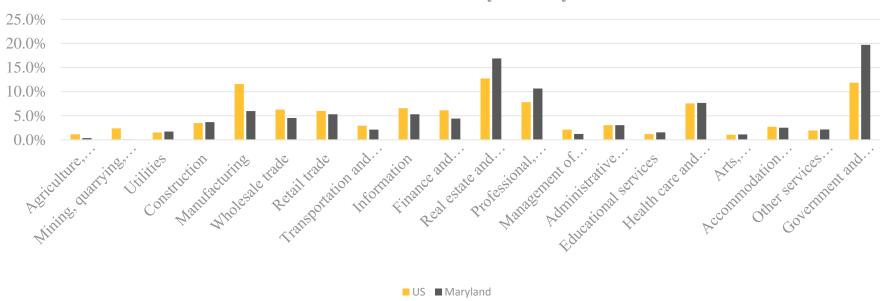
2 Digit NAICS	% Cha	nge	3 Digit NAICS	% Ch		4 Digit NAICS	%	6 Cha	nge
Finance and insurance	~	-1.2	Monetary authorities - central bank	-	4.7	Monetary authorities - central bank	<u> </u>	Δ	4.
			Credit intermediation and related activities	~	-3.3	Depository credit intermediation	-		-2.
			18			Nondepository credit intermediation	-	7	-2.5
	- 2					Activities related to credit intermediation	V	~	-7.
			Securities, commodity contracts, investments	A	2.9	Other financial investment activities	A		3.0
			Insurance carriers and related activities	~	-0.6	Insurance carriers	•	~	-3.9
						Insurance agencies and brokerages	<u> </u>	A	2.2
			Funds, trusts, and other financial vehicles	_	5.6	Insurance and employee benefit funds	4	A	5.3
						Other investment pools and funds	A	A	5.9
Real estate and rental and leasing	~	-1.8	Real estate	_	1.5	Lessors of real estate	A	A	2.3
			*			Offices of real estate agents and brokers	-	7	-1.8
						Activities related to real estate	A	A.	2.2
			Rental and leasing services	~	-11.0	Automotive equipment rental and leasing	7	7	-2.1
						Consumer goods rental	-	~	-8.7
						General rental centers	4		-17.3
						Machinery and equipment rental and leasing		7	-23.5
			Lessors of nonfinancial intangible assets	_	-3.5	Lessors of nonfinancial intangible assets		_	-3.5
Professional and technical services		19	Professional and technical services			Legal services	-		-1.7
Tolessional and technical services	pleases	1.5	1 Totessional and technical services	, manua	1.5	Accounting and bookkeeping services		w	-2.1
						Architectural and engineering services	-	W .	-1.1
						Specialized design services	4	Δ.	5.1
			8			Computer systems design and related services	40	A.	5.5
			l Mi					A .	1.0
						Management and technical consulting services		IIIA.	3.7
						Scientific research and development services			
						Advertising, pr, and related services		<u> </u>	-3.4
						Other professional and technical services			2.:
Management of companies and enterprises	_		Management of companies and enterprises	_		Management of companies and enterprises		<u> </u>	7.3
Administrative and waste services	_	1.4	Administrative and support services	4	1.2	Office administrative services	A	<u> </u>	5.6
						Facilities support services	4		51.0
						Employment services	4	<u> </u>	1.4
						Business support services	-	~	-11.9
						Travel arrangement and reservation services		Δ.	2.6
			9			Investigation and security services		<u> </u>	3.8
						Services to buildings and dwellings	-	~	-1.8
						Other support services	A	A	2.7
			Waste management and remediation services	_	5.1	Waste collection	<u> </u>	A	4.8
						Waste treatment and disposal	-	~	-1.4
						Remediation and other waste services		Δ.	7.9
Educational services	_	3.8	Educational services	_	3.8	Elementary and secondary schools	4	A .	1.6
						Junior colleges	-	~	-12.0
						Colleges and universities		<u> </u>	5.
			* 1/2*	20		Business, computer and management training	4	<u> </u>	0.
						Technical and trade schools	-	~	-5.
			F			Other schools and instruction		Δ.	2.
				1		Educational support services	400	4	14.

2 Digit NAICS	% Change	3 Digit NAICS	% Cha	nge	4 Digit NAICS	%	Cha	ange
Health care and social assistance	<u> 1.8</u>	Ambulatory health care services	_	3.2	Offices of physicians			1.8
			2		Offices of dentists	<u> </u>	h	1.4
					Offices of other health practitioners	_	<u> </u>	4.2
					Outpatient care centers	_	4	4.4
	1				Medical and diagnostic laboratories		h	4.0
					Home health care services	_	h	5.3
					Other ambulatory health care services	<u> </u>		5.0
		Hospitals	_	0.3	General medical and surgical hospitals	-	P	-0.1
					Psychiatric and substance abuse hospitals	<u> </u>	4	2.3
					Other hospitals	<u> </u>	h	8.0
		Nursing and residential care facilities	-	1.1	Nursing care facilities, skilled nursing	-	P	-1.9
					Residential mental health facilities	_	4	4.0
					Continuing care, assisted living facilities	_	h.	3.1
					Other residential care facilities	_	h.	2.7
		Social assistance	_	1.8	Individual and family services	_	h	4.5
					Emergency and other relief services	_	h.	1.7
	1				Vocational rehabilitation services	~	P	-4.4
			200		Child day care services	<u> </u>	h.	1.9
Arts, entertainment, and recreation	<u> 2.8</u>	Performing arts and spectator sports	_	5.2	Performing arts companies	<u></u>	h	16.2
	121				Spectator sports		A.	3.3
					Promoters of performing arts and sports	_	h	1.8
					Agents and managers for public figures	_	A	18.4
					Independent artists, writers, and performers	-	*	-12.5
		Museums, historical sites, zoos, and parks	_	2.1	Museums, historical sites, zoos, and parks	_	A	2.1
		Amusements, gambling, and recreation	-	2.3	Amusement parks and arcades	_	h	8.9
		1.0			Gambling industries		h.	3.0
79					Other amusement and recreation industries	_	<u> </u>	1.9
Accommodation and food services	a 0.2	2 Accommodation	-	-0.2	Traveler accommodation	~	P .	-0.9
	161				Rv parks and recreational camps	_	h .	31.5
					Rooming and boarding houses	*	,	-63.7
		Food services and drinking places	~	0.2	Special food services	_	<u> </u>	1.2
					Drinking places, alcoholic beverages	-	-	-2.9
					Restaurants and other eating places		4	0.3

2 Digit NAICS	% Change	3 Digit NAICS	% Ch	ange	4 Digit NAICS	% Cha	ange
Other services, except public administration	a 0.3	Repair and maintenance	-	-0.1	Automotive repair and maintenance	<u> </u>	0.1
11 180				95	Electronic equipment repair and maintenance	_	6.2
					Commercial machinery repair and maintenance	~	-4.4
					Household goods repair and maintenance	~	-0.7
		Personal and laundry services	_	0.7	Personal care services	~	-1.7
					Death care services		0.9
		- 4 %			Drycleaning and laundry services	_	3.5
,1					Other personal services	_	4.3
25		Membership associations and organizations	_	1.4	Religious organizations	▼	-2.0
¥					Grantmaking and giving services		4.6
					Social advocacy organizations	_	0.6
					Civic and social organizations	_	1.4
					Professional and similar organizations	A	1.5
		Private households	~	-3.4	Private households	W	-3.4

Appendix B – Share of GDP

2018 Share of GDP by Industry



Full industry names in order from left to right are:

- Agriculture, forestry, fishing, and hunting
- Mining
- Utilities
- Construction
- Manufacturing
- Wholesale trade
- Retail trade

- Transportation and warehousing
- Information
- Finance and insurance
- Real estate and rental and leasing

Professional, scientific, and technical services

• Management of companies and enterprises

- Administrative and waste management services
- Education services
- Health care and social assistance
- Arts, entertainment, and recreation
- Accommodation and food services
- Other services, except government
- Government

Appendix B – Share of GDP by Industry H

Appendix C – Maryland growth industries

The following is a list of Maryland growth industries – industries with higher than national concentration and over the year growth. The columns are industry title, 2018 employment level, average weekly wage (AWW), over the year employment growth (OTY), over the year employment growth rate (OTY%), and Location Quotient (LQ):

Industry Title	2018	AWW	OTY	OTY	LQ							
	Employees			(%)								
Goods Producing												
CONSTRUCTION												
Construction of buildings	36,323	\$1,412	244	0.7	1.23							
Specialty trade contractors	109,887	\$1,215	2,737	2.6	1.31							
Manufacturing												
Computer and electronic product manufacturing	20,227	\$2,348	1,254	6.6	1.04							
Services Providing												
Transportation and Warehousing												
Transit and ground passenger transportation	12,100	\$655	110	0.9	1.38							
Couriers and messengers	14,946	\$903	986	7.1	1.13							
Warehousing and storage	21,808	\$899	3,357	18.2	1.04							
FINANCE AND INSURANCE												
Funds, trusts, and other financial vehicles	452	\$3,391	24	5.6	1.67							
REAL ESTATE AND RENTAL AND LEASING												
Real estate	34,951	\$1,319	527	1.5	1.16							
PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES												
Professional and technical services	251,938	\$1,911	4,674	1.9	1.48							
ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT A	ND REMEDIATIO	N SERVIC	ES									
Administrative and support services	164,140	\$831	1,983	1.2	1.02							
Waste management and remediation services	9,067	\$1,042	436	5.1	1.14							
EDUCATIONAL SERVICES				•								
Educational services	69,413	\$1,111	2,553	3.8	1.31							
HEALTHCARE AND SOCIAL ASSISTANCE												
Ambulatory health care services	146,656	\$1,263	4,565	3.2	1.07							
Hospitals	106,622	\$1,162	288	0.3	1.15							
Nursing and residential care facilities	70,812	\$677	783	1.1	1.16							
ARTS, ENTERTAINMENT, AND RECREATION				•								
Amusements, gambling, and recreation	37,328	\$425	855	2.3	1.2							
OTHER SERVICES												
Personal and laundry services	32,677	\$561	224	0.7	1.19							
Membership associations and organizations	26,736	\$1,177	367	1.4	1.05							



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